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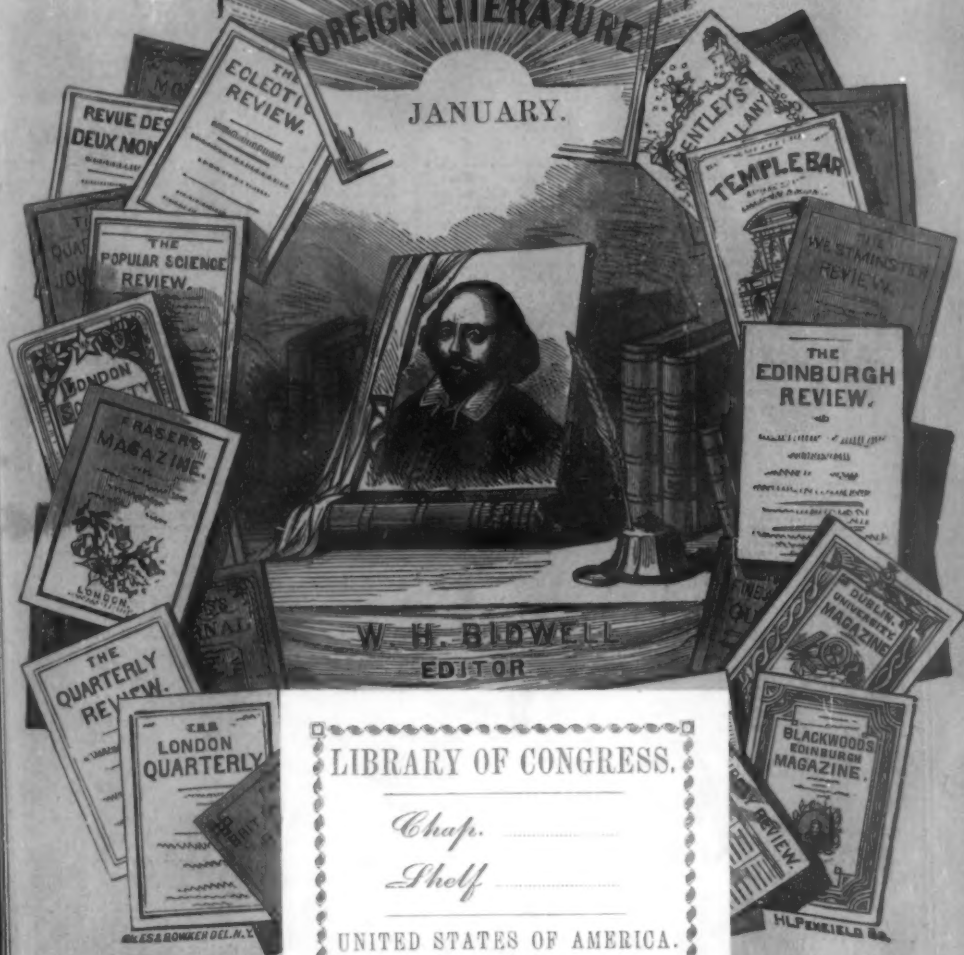
1877.

Vol. XXV.—No. 1.

THE
ECLECTIC
MAGAZINE

OF
FOREIGN LITERATURE

JANUARY.



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UNITED STATES OF AMERICA.

NEW YORK:

E. R. PELTON, PUBLISHER, 23 BOND STREET.

AMERICAN NEWS CO., AND NEW YORK NEWS CO., General Agents.

Terms: Single Numbers, 45 Cents. Yearly Subscription, \$5.

HANOVER FIRE INSURANCE CO.,

120 BROADWAY, N.Y., CASH ASSETS, JAN. 1, 1876, \$1,592,775.09.

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PUBLISHER'S NOTE.


We hope our friends and subscribers will assist us in increasing our circulation for the new year, and we shall take every means to make the *ELECTRIC* a necessity to the intelligent reading public.

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 Mr. J. Wallace Ainger is our general Business Agent.



Eclectic Magazine

OF

FOREIGN LITERATURE, SCIENCE, AND ART.

New Series,
Vol. XXV., No. 1.

JANUARY, 1877.

Old Series Com-
plete in 63 vols.

THE ARCTIC REGIONS AND THE ESKIMO.*

As is well known, this is a sceptical, fault-finding age, and so our readers must not be surprised if they find old forms and names overthrown in the very heading of our article. Our grandfathers talked of the 'Esquimaux' and were content; just as our grandmothers when they sucked eggs extracted the yolk by an old and time-honored process. So far as regards these venerable women, a new generation has sprung up which will not allow them to pursue such a hand-to-mouth means of alimentionation, but insists on a more scientific treatment of barn-door deposits. In the same way we are

not suffered to write 'Esquimaux' after the good old spelling, but are quite behind the age unless we adopt the form 'Eskimo.' Well, where no principle is involved, we are quite ready to comply with any change which will ensure us a quiet life, and so we are willing to follow the learned Dr. Rink in the orthography of the name of the tribes for which he has done so much, and to call these interesting members of the great human race no longer 'Esquimaux,' but 'Eskimo.' If there is any joking on so serious a subject as the nomenclature of a family so widely spread over the Arctic regions, we may add that the best of the joke is that the Eskimo do not speak of themselves by the name so commonly given them by foreigners, but simply and proudly as *Innuït*, that is, 'the people,' as though they were the only people on the face of the earth; a confidence all the more remarkable if we consider that isolated

* *Tales and Traditions of the Eskimo, with a Sketch of their Habits, Religion, Language, and other Peculiarities.* By Dr. Henry Rink, Director of the Royal Greenland Board of Trade. Translated from the Danish by the Author, and Edited by Dr. Robert Brown; with numerous illustrations, drawn and engraved by Eskimo. London, 1875.

tribes have been met with, numbering not a hundred individuals, who were convinced, until discovered by Arctic explorers, that they were the only members of their race that existed; so completely, while they kept the language spoken by the whole race, had the memory and tradition of a common origin with other Eskimo tribes died out among them. And yet the Eskimo straggle over, if they do not occupy and fill, vast regions, which, fortunately for them, are never likely to excite the cupidity of the Alexanders, Napoleons, and Frederick Williams, of this civilised and wicked world.

Some years ago our attention was attracted by the heading of an article in a periodical too much given to supply its readers with chaff rather than grain. It was entitled, 'An Enquiry into the History of the Ancient Picts,' a most interesting subject, to which we eagerly turned. What was our surprise, however, to find that the whole Essay consisted of these words: 'Who were the ancient Picts?' a literary production which might vie for brevity with that famous chapter in Pontoppidan's 'History,' 'There are no snakes in Iceland.' As with the Picts and as with the snakes, so with the Eskimo; all that was known of their early history and origin might have been compressed into the narrow compass of an interrogative sentence. Fifty years ago, and, indeed, down to a much later period, the ethnological inquirer might have shouted, 'Who are the Eskimo?' till he was hoarse, and yet received no answer. The little, in fact, that was known of them was derived from persons either too ignorant or too pre-occupied to be able to ascertain the truth. Whaling captains and Arctic voyagers when they came in contact with the Innuits in their snow-houses, cared the one only for blubber, which they envied the Eskimo for consuming, the other only for open water and the North-West Passage. 'Whales,' and 'the way to Behring's Strait?' were the only questions which these simple people were required to answer by their visitors, and if they sometimes afforded the whalers welcome information as to whales, the intelligence they could give to the Arctic explorers as to open water towards the North-West was meagre and unsatisfactory in the extreme. The result of the contact between the civilised and

uncivilised races was in nowise useful to science. All we knew of the Eskimo from these sources was that they were most accomplished seal- and whale-hunters; that they delighted in blubber, and that when they had plenty of it they lay down on their backs to be crammed by their wives with the precious dainty, of which they were capable of devouring twelve or fourteen pounds in a day. It must be owned that the example thus set them by their elders was well followed by the rising generation. An Eskimo boy—we forget whether it is Parry or Richardson who tells the story—ate in twenty-four hours eight and a half pounds of seal-meat, half frozen and half cooked, one pound and two ounces of bread, and one pint and a half of thick soup; washing all this down with three wine-glasses of Schnapps, a tumbler of grog, and five pints of water. As they seldom or never washed, except when the warm summer sun melted the ice and snow of their huts, they were so dirty that it was hard to tell what the complexion of the race really was under the mask of soot and clotted train-oil which besmeared their faces. It will readily be conceived that a warm bath to such people was more than a luxury. It was, in fact, as dangerous an experiment as a Turkish bath to many Englishmen. In the great interest of tubbing we are happy to say that Parry, who was the first to introduce warm baths among the Eskimo, found that they were attended with the happiest results in the cure of rheumatism and kindred diseases. Besides affording the Eskimo this medical treatment, the various expeditions collected lists of words, but as for these vocabularies of the language, they rivalled that famous one compiled by the veracious Daly in 'Gilbert Gurney' at Boulogne, as the dialect of Timbuctoo, in which 'Phiz' meant lightning, 'Bang,' thunder, and though last, not least, 'Tooroluro,' a wheel-barrow.

Under these circumstances it is fortunate for the Eskimo that they have fallen on a far more critical age, which, in spite of all its absurdities about egg-sucking, can do for them what they would never have been able to do for themselves, that is, tell them who they are and whence they came, and, in fact,

expand the question, 'Who were the Eskimo?' into a very satisfactory Ethnological Essay. But let not our readers be alarmed, we are not going to break their heads in this fine autumn weather with a dry philological discussion. We will not drag them from the fresh woods and green fields to ponder over roots and conjugations. All that we shall assume is the right to be rather *doctrinaire*, and to beg them to believe us when we state results. The Eskimo, then, are the most considerable remnant in northern regions of that nameless pre-historic race of fishers and hunters, who once clung to the coasts and shores of Europe, until they were pushed away into the holes and corners, and to the very verge and edge of the great continents of the earth by the successive bands of the Aryan migrations. They once existed in England, France, Germany, Denmark, Sweden, and Spain, in all of which they have left their traces in interments and implements, and lay-stalls and 'kitchenmixens.' They were of Turanian race; and even at the present day they exist as Lapps in the rugged mountains of Spain. In Sweden we find them as Lapps and Finns; and so on along the Russian coast there is a fringe of them that clings to the edge of the land on the shore of the frozen ocean. How the great division of this pre-historic family found their way to the vast and inhospitable regions in which they are now known to foreigners as Eskimo, is open to doubt. The received theory now is that they were forced thither from the coasts both of Asia and America, across Behring's Strait, by the migrations of Indian and Mongolian tribes; but it is at least as likely that these hardy savages, who are nowhere so happy as in their native tents, if they only have plenty of seal-meat and blubber, have existed from time immemorial in the Arctic regions, and in this sense may claim to be as really autochthon and indigenous children of the soil, or rather of ice and snow, as any race on the surface of the globe. But whether indigenous or not, there they are, a branch of the great Turanian family, and carrying with them in their speech the best evidence of their origin, in the affinity which their language bears to the Lapp, Bask, Hungarian, and Turkish dialects of their

common race. The reader therefore sees at once that these Eskimo, whose existence—huddled up in snow and ice, and condemned for half the year to a perpetual night (which we may assure them from experience is not nearly so dark as London in a really good winter fog), and with few or no wants beyond blubber—seems so wretched and miserable to civilised man, have attained to the dignity of being members of the great body politic of nations, and are by kinship cousins to some of the proudest and haughtiest peoples in the world. There is a Turkish proverb, we believe, which speaks of the pride of the Magyar as exceeding that of the peacock, and no doubt the Magyar repertory of wise saws, which embody the 'wisdom of many in the wit of one,' contains a saying as apposite to the Turks; but here we find that the Eskimo are of the same race as both these peacocks, and we dare say have quite as much right to pride themselves on their national characteristics.

And now, having thus settled the position of the Eskimo among the races of the world, let us look a little more closely at them by the aid of the light which the researches of Dr. Rink have shed upon them. If, as we think can be shown, Dr. Rink was fortunate in finding so fresh a subject as the Eskimo and their customs, tales, and traditions, the Eskimo in their turn were lucky in having a spokesman so well qualified to become their advocate. The learned Doctor has, for the last sixteen winters, either been a resident or a traveller on the shores of Davis' Strait, from the southernmost point of Greenland, Cape Farewell, up to the 73rd degree of north latitude. If we reckon his residence by summers, it was still longer, for he was in Greenland for twenty-two summers. He went out to that somewhat unpromising region from Denmark, his native country, in Government employ, first as a scientific explorer, until, rising in the service, he became Royal Inspector or Governor of the Southern Danish Establishment in Greenland. In one respect he set a good example to all governors who have to deal with the natives of a foreign land: he was not above learning the language and acquiring the speech of the people he was to inspect and govern. In this way he came to know and to love the sim-

ple race among whom he lived. He soon saw that there was more in the Greenland Eskimo than mere seal-meat and blubber; that they had a beautiful language and a rich store of traditions and popular tales. These he set himself diligently to collect, and having overcome the natural shyness of all primitive people to impart their popular beliefs to strangers, he ended by gathering more than 500 tales, 150 of which are published in the present volume. These researches enable him to speak with an authority on all that concerns the Eskimo to which no other living man can pretend. In that most useful and laborious work, Ersch and Gröber's 'Cyclopædia,' there is, indeed, a monograph of the Eskimo which summarises all that was known of these tribes up to the date of its publication; but, then, it was written so far back as the year 1843, in what may be called the pre-Franklin times. We are indebted to it for an explanation of the name 'Eskimo,' which, it seems, in the language of the Abenaki, a tribe of Red Indians in Southern Labrador, means 'raw-fish-eaters,' and was given by them to their neighbors in Northern Labrador as a term of reproach and an equivalent for savages. The manners and customs of the Abenaki were, no doubt, rude and wild. They were given to scalp and torment their enemies, like other Red Indians, but to fall so low as to eat their fish raw was an abomination to them, and so when they came across one of the *Innuits*—one of '*the people par excellence*,' as their northern neighbors styled themselves—they called him 'Eskimo,' as much as to say, 'There he goes, the raw-fish-eater!' For all the rest of the world the term of reproach applied to one tribe has passed into the name of a nation, and the mockery of the Abenaki, adopted, we believe, in the first instance by the French, has been stereotyped in all books of Arctic travel as the name of the *Innuits*. So far as real knowledge of the Eskimo is concerned, all that has been written of their habits, manners, and customs before Dr. Rink took the subject in hand is little better than so much waste paper. Here was a very interesting race waiting to be understood, and biding its time. Dr. Rink has been the first to do them that good office, and, like the Greek philosopher of

old, he appears on the scene of this inquiry compared with all before him, as a sober man amongst drunkards. Though his book is nominally a collection of popular tales, it contains in reality much more. In an elaborate introduction he treats in order of the means of subsistence of the Eskimo, of their language, social order and laws; of their religion, origin and history, and of the influence which contact with the Europeans has exerted on the race. At last we come to the tales and traditions themselves, but not before we have spent a deal of breath in running our course through the several heads of inquiry which the learned Doctor has laid down for us.

The first point that strikes the inquirer is the remarkable uniformity of the race as to its language and customs. Though the various tribes are very local in their migrations, clinging to the sea-shore, and very rarely withdrawing for any distance from the coast, their territory—the empire of snow—is immense. Let it be remembered that the Eskimo are the only inhabitants of the shores of Arctic America, and of both sides of Davis' Strait, and Baffin's Bay, including the whole of Greenland. Besides this, they are found inhabiting a tract of about 400 miles on the coast of Asia, beyond Behring's Strait. Southward they extend to about the 50th degree of north latitude on the eastern side, and to the 60th on the western side of America, and to about the 60th degree on the shores of Hudson's Bay. As regards their northern limits the Eskimo have been found as far north as our expeditions to the North Pole have penetrated; and as they are found most where their means of subsistence are most abundant, it is probable that the expedition of Captain Nares, on which such high hopes hang, may find them still further north in that great unknown region, the mystery of which we trust soon to hear that our countrymen have succeeded in solving.* As Kane's and Hall's expeditions found abundance of seals and birds at their furthest point, it is reasonable to suppose that Captain Nares will find Eskimo engaged in fishing and hunting still nearer to the Pole, according to the good old law, that where the

* Since the above was written, Captain Nares has returned to England, having failed to reach the pole.—ED.

carcase is there the eagles will be found. But whether these tribes extend to the Polar regions or not, it must be admitted that they range as it is over a magnificent territory, so far as space is concerned. From the north-westernmost to the southernmost point, Eskimo land measures about 3200 miles; and more than this, if a tribe at the westernmost end of their Asiatic ground, beyond Behring's Strait, were to be seized with the insane desire to migrate until it reached the extreme eastern limit of the race in Labrador or Greenland, it would have to travel about 5000 miles along the coast before it reached its journey's end. This, however, is mere theory. As we have said, the Eskimo tribes are very local in their habitats; they range over certain limited districts partly laid down by natural obstacles, and partly defined by hostilities and jealousies with other tribes. And yet, in spite of all these vast distances and the difficulty of communication, there is a singular uniformity, not only in the physical features of the race, but also in their manners, traditions, and language. Thus, in the case of the tribe which Sir John Ross found in North-East Greenland, about 77° north latitude, though these 'Arctic Highlanders,' as he called them, believed themselves not only to be the only Eskimo, but even the only inhabitants in the world, the Eskimo interpreter whom Ross brought with him from South Greenland soon recognised their speech as his own, while many of their customs were identical with those of the rest of the race. But though thus uniform, Dr. Rink has done well to map out the Eskimo as it were geographically, and so to put his readers in a position to carry the local habitations of the main divisions of the race in their heads. Of the Greenlanders proper he makes three divisions:—1. The East Greenlanders, who are to be found on the east coast of that country, down to Cape Farewell. 2. The West Greenlanders, or the inhabitants of the Danish Trading Districts from Cape Farewell in the south, up to the 74th degree of north latitude. 3. The Northernmost Greenlanders, the true Hyperboreans of this branch, who inhabit the west coast to the north of Melville Bay, and to whom, as we have already mentioned, Sir John Ross gave the name of 'Arctic

Highlanders,' and who from time immemorial appear to have been cut off by impenetrable glaciers to the north and south from the rest of the race. 4. We have the Labrador Eskimo, across the water. 5. The Eskimo of the middle regions, occupying all the coasts and islands from Baffin's and Hudson's Bays, so far as Barter Island, near the Mackenzie River. As Dr. Rink well says, 'This is the most widely spread of them all;' the icy solitudes over which it ranges representing an area measuring 2000 miles long and 800 miles broad. These are the Eskimo proper of whalers and Arctic explorers; these the tribes which Parry and Richardson visited and described, these the kindly savages who witnessed the last agonies of Franklin's devoted band, who preserved the relics of that ill-fated expedition, from whom they were recovered by McClure and M'Clintock, and Osborne and Young, and their gallant companions. 6. Beyond these middle Eskimo come the Western Eskimo inhabiting the remaining coast of America to the west and south; these vary most from the common type, as might be expected, from their proximity to Red Indian tribes, with whom their blood by intermarriage with prisoners has got mixed.—Last of all come the Asiatic Eskimo, purer than those on the American coast, but still not so unmixed as their brethren of the middle and eastern regions.

Mankind, and more especially mankind who are readers, are very exacting in this nineteenth century. But we do not pay any of our readers the bad compliment of supposing him to be so unreasonable as to imagine that Dr. Rink should be intimately acquainted with all the branches of this widespread race. To do that he must have spent not sixteen but sixty years in his researches into the *Innuits*, and a real 'Wandering Eskimo' must have stumped over these weary 5000 miles between Cape Farewell and the parts beyond Behring's Strait. It has been cynically said that some men write best on subjects of which they know little and understand less. This cannot be said of Dr. Rink; he writes best where he knows best, and relying on the remarkable uniformity which exists between all Eskimo, he conceives that he has satisfied all the sci-

entific requirements of his investigation by examining one of the principal divisions of the race, taking of course that with which he was best acquainted. To him, therefore, the Greenlanders represent the Eskimo in general as their state may be supposed to have been when Europeans came to settle among them during the early part of the last century. Now as the worthy Doctor is not a Patriarch, and does not even rival Jenkins or Old Parr in the length of his days, it is evident that when he describes the condition of the Eskimo in the year 1720, he must be presenting us with a fancy picture in which he has eked out his own experiences with the traditions and tales of the race. It is probable, however, that as the Danes have always treated these simple people with the most paternal consideration, denying them that fire-water, which has ever been the bane of semi-savage races, and in other ways looking after their material and moral needs—it is probable, we say, that the Greenland Eskimo of the present day are comparatively little altered from their ancestors a century ago, except that they now profess Christianity. It may be that they still live on in the good old way, subjects of the Dane, but not Danicised except in a few unimportant matters. In one great point they are undeniably the same. They still subsist upon seals and cetacea, and they still cling, as was the habit of the race in the most ancient times, to the sea-shore. The seal is to them more than rice and the bamboo to the Chinese, or the potato to Paddy before the famine. We have no doubt at all that an Eskimo would prefer seal-meat served up with its attendant blubber, to the most savory dish of modern cookery. We question if that were put before him, together with a dish of beefsteaks, whether he would not fall to at once at his national dish. Besides regarding seal-meat as mere nourishment, the Eskimo set still greater store by it. They look upon it and its fringe of blubber as medicine. Thus when 'Joe,' that heroic Eskimo who supported Hall's Expedition by hunting after Hall himself died, was transplanted to America and thence to England, and languished and grew consumptive, his only remark on joining Captain Young in the 'Pandora' last year was, 'By-and-

by get little seal-meat, then all right;' a prediction which Mr. MacGahan tells us was verified to the letter when he got on his native ice. As soon as they killed their first seal, of which no doubt Joe had his full share, he began to grow fat; his hollow cheeks puffed out, his whole expression changed, and he was in short another man. 'Naturam expelles furca, tamen usque recurret,' which may be freely rendered, 'You may drive out seal-meat with a silver fork, but an Eskimo will always eat it if he can.'

Joking apart, the seal is everything to the Eskimo. Seal-meat and blubber feed him; with seal-skins he is clad, and not only he, but the women of his family, of whom Mr. MacGahan gave such a charming description during his stay at Disco—not to mention two engravings by Eskimo artists, which adorn the present volume, and represent, one a very pretty young girl, the other a young mother, with a coquettish top-knot, clad in seal-skin from head to foot, with a baby in an *amook*, or hood of the same material, peeping over her right shoulder. Why any mother or maid-servant, after beholding this easy way of carrying an infant, should either dandle it on the arm or run the risk of breaking its tiny neck in a perambulator we cannot tell. It might be hot in summer, but in rain and wet and snow, in winter—in ordinary English weather, in short—it is plain that any Lilliputian warehouse that introduces it will confer, as the advertisements say, 'a boon' both on mothers and maids. Perhaps at first those proud nurses, who so long despised perambulators, may look down on the *amook* also with scorn, but their struggle will be all in vain—*solvitur portando*, one trial of the *amook* in Belgrave-square or Portland-place, will establish its supremacy forever. But to return to our Eskimo. Food and dress go a great way towards making life happy, but the seal does much more for the Eskimo; its skin covers his boats, both great and small; its bladder floats the fatal harpoon, which does it to death, by preventing it from diving, while in those rare cases in which the sealer misses his aim, it saves the missile from sinking. Seal blubber supplies their lamps and warms their houses, and in a word, without the seal, an animal easily captured and abundant

in the Arctic regions, the Eskimo would not be able to exist a month. As for their dwellings, they are of two kinds—tents in the summer, and houses or huts in the winter; the tents are much the same among all the tribes, raised on poles covered with a double layer of seal-skins, highest at the entrance and lowest at the opposite end. The houses differ; for the most part they are built of stones or turf; the rafters and pillars which support the roof-tree being of wood. It is only the Eskimo of the middle region who construct their houses of blocks of ice; while those of the west build them of planks. They are all on the same plan; the entrance being a long passage, which dips in the middle and rises at each end, probably for what may be called strategical purposes. The house itself invariably consists of one room, in which sometimes several families live together, sleeping along a broad ledge, which, in Greenland at least, only occupies the side of the house opposite to the entrance. Of such a house Dr. Rink gives us a picture as the frontispiece of his volume. It is called the dwelling of 'a very rich family,' and therefore contains many articles of luxury not to be met with in ordinary Eskimo dwellings. Thus, we see a Dutch clock hanging up on the wall, and close by it a fiddle. The sides of the house are adorned with missionary prints, and there are cups and saucers, and vessels of pottery, and that luxury of all luxuries among the Eskimo, a stove. But for the rest the arrangement of the house is as purely Eskimo as the meanest habitation of the race. There are the pillars which support the roof-tree and the rafters; there is the ledge or bench running round the room, on which is seated the father of the family, smoking a pipe, in sign of his idle ease; while one of his sons nurses a baby, and another reads a book. The men among the Eskimo do no domestic work; they fish and hunt, and after they have brought home seals and birds their day's toil is done. The women stitch, and sew, and cook, and tend the house. Thus, to return to the frontispiece, we see the materfamilias struggling with a child behind one of the pillars, which prevents our seeing exactly what she is doing; near her, on the ledge, sit two daughters, the one sewing garments and

the other stretching boots of seal-skin, a third is stooping over a tea-kettle, and laying the tea-things. On the floor lie a heap of wild-fowl, and under the ledge peeps out an earthen pan containing the bones of a seal. Add to these two fowling-pieces on the wall, numerous articles of clothing hung up on strings, and a little bedding, and the aspect of the abode of this 'very rich family' is complete. This picture, which, *mutatis mutandis*, applies to all Eskimo dwellings, shows that the Eskimo may, as Dr. Rink says, be more properly classed among the people having fixed dwellings than among nomadic nations; but this feature in their existence we imagine to be due rather to the necessities than to the desires of the race. It is the cruel winter cold, and ice, and snow, which drive them into tents, and huts, and houses. Hardy as they are, and able to endure the winter without fire in their stuffy and stifling habitations, they would perish if they were exposed to the full fury of the frost. They would be as nomadic as the Bedouin if they could, as little tied to the soil as a Kaffre or a Bushman; but the climate constrains them, much against their will, to live under shelter for the greater portion of the year.

As fishers and hunters, whose harvest is derived almost entirely from the sea, the Eskimo have little idea of property or trade. The last is confined to articles of barter, exchanged at irregular intervals; and as for their property, it may be called rather common than personal. Beyond a few necessary utensils and arms, together with a store of food sufficient for a portion of the year, few Eskimo have any personal property beyond their clothes and kayaks. All else is owned rather by the community than the individual, and this custom is based on a certain natural partnership, or joint possession of goods, confined to wider or narrower circles of the inhabitants, who, by an instinctive communism, combine to dwell together, often several families in one house, for mutual assistance and support. Of course, the 'very rich family,' of which we have spoken, would be what may be called 'self-contained,' but such affluence was the exception, and not the rule of domestic life among the Eskimo, and is besides a creation of modern times. It sometimes happened

that a man's own family, especially when, in the old times, he allowed himself the doubtful luxury of *two* wives, sufficed to fill a capacious house. In that case the sons and daughters were in no need of other support, and they, too, were self-contained; but, sooner or later, when such a family split up by marriage, other inmates were admitted under the roof who were called 'housemates' or 'house-fellows,' and thus three or four, or even more families were found living together, each having its allotted place on the ledge or bench, lit with its own lamp, but all working together for the common good, and owning the house in common. As a natural consequence, it would often happen, in spite of the slow increase of the population, that this community of families outgrew the house, and a new knot of 'placefellows' in other houses arose beyond its walls, forming a hamlet, but still owning certain things in common, and so all bound together by certain ties. In this arrangement Aristotle would have hailed the Eskimo as excellent examples of his dogma, that man is *Ζῷον φύσει πολιτικόν*, and, intolerant of isolation, was forced by a law of his nature to combine with his fellows and to found a community. It is remarkable that in these houses and in these communities, though this or that member was esteemed for his own sake, he was never regarded as a chief, and never recognised with the respect which each family felt for its own head. The Eskimo, therefore, neither as housemates nor as placefellows submitted to the authority of one of their number. These popular tales teach us how any man who tried to assume such a position was looked upon as an usurper and put down and put an end to by the combined efforts of the placefellows. From this point of view the Eskimo polity was most democratic. They were a combination of free men, formed out of family life, and they would not tolerate any tyrant among them. Furthermore, if any stranger from a distance wished to settle down and become a member of such a local community, he could only be admitted by the general consent of all the placefellows.

Bearing these institutions in mind, let us now consider more closely some of their laws with regard to property. Of

every seal caught at a winter-station, small pieces of flesh, with a proportionate share of blubber, were distributed among all the placefellows. In this way the very poorest could never want for seal-meat or lamp-oil, provided the usual capture of seals did not fail. There could be no Eskimo Jack Horners sitting on the ledge of the house all alone, and munching the seal which they had been fortunate enough to harpoon. Beyond the confines of the district inhabited by such a community any one was at liberty to set up his house and hunt and fish; and every one, whether in a community or out of it, had the right to all drift-wood which he found and was strong enough to carry up on the shore above high-water mark, taking care to put a stone upon it to mark it as his own. If a seal was harpooned, and escaped with the harpoon sticking in it, it belonged to the harpooner so long as the bladder was attached to the harpoon. If two hunters at the same time hit a seal or bird, it was their joint property, and was equally divided. Whales, however, and other large animals, as walrus and bears, however captured, were considered common property, as being of that size and strength that, except in rare cases, they could only be secured by the united strength of the community. In case no seals or other food were brought home to a house, those families in it who were best off for provisions invited the inmates, but not the placefellows, to share their meat with them. In no stipulation does the common right to share all the property that another had beyond necessary articles stand out so prominently as in that which provided that if a man borrowed the tools or weapons of another, and lost or injured them, he was not bound to make any compensation to the owner; for it was based on the notion that if a man had anything to spare or to lend, it was considered as superfluous, and not held with the same right of possession as his more necessary belongings, but, on the contrary, as something to be classed among those goods which were possessed in common with others. In fact, we are led to the conclusion that the right of any individual to hold more than a certain amount of property was jealously regarded by the rest of the community, who did not scruple to bor-

row it and waste it. No one could deprive any man of his weapons or his clothes; but if he possessed more than a certain amount of that property, his right to it passed away and became vested rather in the community who could use and wear it than in him who could not. There was no room in the Eskimo code for the hundreds of coats and waistcoats which fashionable tailors send in to the account of silly young men. This common-sense view of the accumulation of property led to a very natural result. Superfluous clothes or weapons rarely existed; and even in the case of kayaks, though a man might possess two of these necessary boats, if he owned three, the third must be lent to some relative or housemate. According to this view of political economy, anything that was not used was regarded as idle, and wasted, and liable to forfeiture for the good of the community.

These rights of the community were accompanied with certain obligations on the individuals who composed it. It was considered as law that every man, as far as he was able to do so, should follow the trade of a hunter on the sea, and catch seals and whales until he was either disabled by age or had a son to succeed him. If he neglected this duty, on which, indeed, the foundations of the whole community rested, he brought on himself the reproaches, not of his housemates alone, but of the placefellows as well. Further, if he neglected to bring up his children to the sea from their earliest years, he was pointed at as a 'ne'er-do-weel,' who reflected no credit on the community.

Out of this intimate way of life, family side by side with family living in so many compartments of the broad bench in each house, another peculiarity of Eskimo life sprung, and one which we must say reflects the greatest credit on that innocent race. Living so closely packed together, though after all not nearly so closely as the lodgers in many a house near the Seven Dials, a *friendly way of conversing*, Dr. Rink tells us, was necessary. All high words and quarrelling were considered unlawful. They evidently considered scolding like the letting out of water, and nipped it in the bud by universal consent. An Eskimo house, therefore, was never the scene of

such Irish, and for that matter English 'rows,' as may be heard in poor quarters of this metropolis any Saturday night. The very language of the Eskimo is devoid of any real words for scolding—the 'slang' of the Briton and the '*Scheltwörter*' of the Teuton are alike absent in the vocabulary of that long-suffering race. How, then, do they show their annoyance at an offence? 'By silence,' says Dr. Rink. At anything unpleasant the Eskimo hold their tongues, not, like the Psalmist, 'from good words,' but from bad; a fact which shows how far superior they are in patience and forbearance to us, for we have always understood that if there is anything in the world more aggravating to an angry man or woman than another it is to answer nothing to his passionate exclamations; but this treatment, which with us only heaps coals of fire on his hot head, among the Eskimo soon brings the offender to reason.

One great advantage of this peaceful temper and of the community of property was the total absence of litigation and law. No one could sue a man and deprive him of his necessities in clothes and weapons, and as for all the rest of the property of the placefellows or housemates, there could be no legal contention when it was vested in all alike. Some one said that his notion of Paradise was a state of society in which there were no courts of justice. If that Utopian be now alive, he should instantly pack up his portmanteau, which will probably contain all that the law has left him, and taking a passage to Greenland, apply to be admitted a housemate in one of their happy families. But it is literally true there are no courts, except in certain cases to be mentioned, in which the priests enjoy a delegated power; but as even in the happiest condition of society man is fallible, so there are occasional offenders among the Eskimo. A man, therefore, who makes himself disagreeable to his companions and persists in any wrongdoing, is shamed out of his naughty ways by public opinion. At certain times of the year there are meetings for games and festive purposes, which, absurd as it may seem, answer very closely to the great games and gatherings of Greece. There, before the eyes of all the people, the case of the community against

the offender was stated in verse, called a 'nith song,' to which, if he had any answer, he replied in the same strain, each party drumming and dancing as it stated its case. Sometimes the singers were single, at others they were what we should call assisted by counsel, who also sung and drummed and danced. When these pleadings were over, the cheering or dissent of the assembly at once represented the judgment of the country as well as the punishment. Let us hope that all offenders in Greenland have thus been shamed out of their wickedness.

Occasionally, of course, there were great crimes. The race believed, and still believes, in witchcraft and punishes witches, not only on the principle of Hobbes, that though they can do no harm they ought to be punished, because they believe they can do it; but also because a man who believes that he is bewitched is for all harmful purposes as badly off as if he actually were in that unhappy condition. Our improved laws refuse to recognise the belief in the black art, which, in spite of the diffusion of useful knowledge, is still so deep-seated among our rural population; and so yokels, who believe themselves to be bewitched, meet with little sympathy from judge or jury. But in simple Greenland it is or was very different; there the witches believe that they can bewitch, and the bewitched believe in witchcraft; and so witches are punished by the priests, for this belongs to moral and ecclesiastical rather than to common law. In early heathen times witches were certainly put to death by the priests; but it is not quite clear what becomes of them under the Dano-Christian dispensation. In like manner, in old times, as we have intimated, ambitious persons who aimed at acquiring more property or power than the community thought good either for themselves or the state were solemnly and deliberately put to death, while ordinary cases of homicide and murder were left to private law,—that is, to the revenge of blood, which fell as a duty on the nearest male relative of the slain, who, having discharged that duty, was bound to denounce himself to the relatives of the man on whom he had fulfilled the sacred duty.

As to religion the Eskimo, before they conformed to Christianity, had little or

none; but that little sufficed for their simple condition of existence. On one point they were as liberal as the Oxford undergraduate, who, when called on for a text to prove the unity of the Godhead, answered, 'There is but one God and Mahomet is his prophet.' They believe that man has a soul, which exists after death; but they extend this belief to the lower animals, which they endow with souls of their own, and at the same time believe that the souls of men can migrate to the bodies of such animals. As to the Higher Powers, they believe that the whole visible world is ruled by supernatural powers, whom they call *Owners*, and as almost every object has its owner, this belief would seem to be a modified Pantheism. As for their cosmogony, the earth with the sea upon it rests on pillars, and covers another world, and is itself covered by an upper world above the clouds. After death human souls go either up or down; but, reversing the belief of all races, the good go to the nether world, where they live in abundance, and are called *arsissut*, that is those who live up to the Dutchman's maxim that more than enough constitutes a feast. It is a land not of milk and honey, but of perpetual seal-meat and blubber. The bad, on the other hand, go to the upper world, where they suffer continually from frost and famine. Like the ancient Lydians they cheat their appetites, and at the same time amuse themselves by playing at ball with a walrus-head, and thence arises the *Aurora Borealis*. It is probable, as in other mythologies, that the Eskimo were at first content with the pantheistic arrangement of supernatural owners who ruled each particular object in the universe; but such a creed is only transitory, and ends in the belief of one Supreme Power. This being was called by the Eskimo *Tornasuk*, 'the supreme helper,' who only, it seems, revealed himself to the *angakoks*, or wise men, that is to the priests. The Goddess of Plenty who, under certain conditions, becomes a Goddess of Famine, they imagined as sitting in front of her house, burning a lamp, and as the oil trickles down from its overflow, it generates the animals which serve man for food. This is when she is in a good humor; when she

is in a bad one, she turns her lamp and withholds the supply of oil, and then the people starve. It does not appear whether Tornasuk has any authority over her; but it is clear if he has, that he does not always exert it, for every Eskimo knows there are seasons when seals fail, and famine follows.

We now come to witchcraft, on which we must first remark that it really, among the old Eskimo, was 'Diamond cut diamond,' or 'Set a thief to catch a thief.' As the whole race believed much more in witchcraft than in anything else, when any one was bewitched he betook himself to the black art for redress. Perhaps as this was practised after resorting to the wise men, or *angakoks* or priests, it might be called 'white art,' as ecclesiastically legitimate; but still it was, after all, nothing but witchcraft. Thus though the priest in what might be called easy cases relied on prayers, in cases of inveterate bewitchment he prescribed counter-charms and incantations, and if these failed, went on to amulets or *arnuat*, which were ordinary objects, as parts of a bird or beast, which having been in contact with certain gifted persons, i.e. *angakoks*, or supernatural beings, were endowed with the power of holding the possessor safe against all the machinations of witchcraft. They were wonderful things these amulets, if we are to believe all that is told of them, for in some cases they enabled a man to change his shape into that of the animal out of whose skin it was made. In very bad cases of witchcraft there was a more 'soveran' remedy still, this was the *tupilak*, or imaginary animal which was sent out to destroy an enemy. This device differed from the amulet in being a sort of Frankenstein, created by the sender. A wizard, for instance, out of a bit of bearskin, would fashion an ice-bear, and bid him be off, and rend his enemy to death. In such a dreadful state of things what was to be done? except to borrow a leaf out of the wizard's book, and create and send out another imaginary beast, if possible, still more formidable, to destroy both the wizard and his *tupilak*. It seems to have been the view of the *angakoks* that it was perfectly fair to hoist the arch-enemy with his own petard. A *tupilak* sanctioned by them was a religious dis-

pensation, but if it originated with a wizard, he might be put to death.

As to the priests or *angakoks* themselves, they were more formidable, but fortunately more benevolent beings than the witches. They were not priests by inheritance, like the Levites, but by prayer, and fasting, and study. By this means they acquired the power of passing out of their own bodies; and after a vision, in which Tornasuk himself appeared to the novice, he granted him a *tornak*, or guardian spirit, whom he could ever afterwards call to his aid. The appearance of the *tornak* was always attended with flame and fire, and occasionally the soul of the *angakok* flew out of its body, and through a hole in the roof, to take a flight for religious purposes. An accepted *angakok* was frequently consulted, not only in cases of witchcraft, as we have seen, but in discovering the cause of disasters, as well as to procure favorable weather for hunting, or bringing seals and whales to the coast, and in the case of the dying, to console them; and after chanting the happiness of the world to come, to send them out of life to the beat of a muffled drum. We are sorry to add, that in their communications to the people on these important matters, they used allegorical expressions which were as puzzling to the uninitiated as the law terms used to the Chiquanous in Rabelais. Dr. Rink tells us that the unshaken faith with which the population regarded the marvellous deeds of the priests cannot be explained except by supposing them to have had a more profound knowledge of the laws of nature, enabling them to forecast matters which depended on physical causes. No doubt they were more intelligent than the rest of the community, that is invariably the case with the priesthood among primitive people. The charter of their power is superior knowledge, but to a much greater extent the secret of their influence rested in the belief of the people in their power for good or ill, a belief which they also undoubtedly shared. It was not exactly the faith that could remove mountains, but it was capable of making the paths of a simple people straight in that condition of society.

Besides these priests who had a recognised status, there were other men

who, though not exactly witches or priests, possessed extraordinary powers, and whom we meet constantly in these tales. First came the *kivigtoks*, recluses who fled from mankind and led a life alone with nature up in the heart of the country. Why should it be so? but so it was, that this kind of existence was attended with wonderful results; a *kivigtok* not only acquired enormous agility, but learned the speech of animals, and even knew, how we cannot tell, all about 'the pillars which support this upper earth.' In other countries a solitary retirement is not attended with such advantages, nor adopted on such easy terms, for men became *kivigtoks* for very slight reasons. If they were treated with injustice, or even scolded by their kindred or housemates, they were so hurt that they fled away, and we should say, bit the noses off their own faces. In England the worst that a man would do to spite himself under such circumstances, would be to farm a turnpike, in which occupation he may indulge his desire for solitude, and revenge himself on the community by making them pay toll at one and the same time. What will become of this class of discontents when turnpikes are abolished we really cannot tell. Then there were the *angerdlartugsiaks*, a most delightful class both as to the spelling of their names and their pursuits. This was a man of most peculiar education. It consisted in fitting him not for this present life, but for a pauldpost future existence, so that he might be called to life again in case he should ever be drowned—a very common accident, be it remembered, among the Eskimo. This education was also strange; the mother was to fast strictly, the child was to be accustomed to all kinds of nasty smells, and though last not least, he was never to hurt a dog. Finally, when he took to kayaking his father mumbled a prayer over him, and he was sure to come to life again if he was so unfortunate as to be drowned. Besides these special cases the tales are full of fabulous men and monsters, with whom the *Innuits* have adventures, and as in the case of the Norsemen and the Trolls, almost invariably have the best of the encounter. It is the old rule that brute strength, unaided by wit, is unequal to cope with superior intelligence and less physical

force; in this respect the Eskimo tales are Jack the Giant Killer over again.

As for the 'Tales' themselves, they will hold their own for genuineness and truth with those of any race. Lessons of justice and truth are always inculcated, and often in a terrible way. The first we shall quote is a stern exhortation to charity, and the duty of housemates. Once on a time there was a poor orphan-boy who lived among a lot of uncharitable men. His foster-mother was a wretched old woman, and his name was Kagsagsuk. They were not allowed to enter the house, but had their abode in a little shed next to the house-passage. There Kagsagsuk lay among the dogs, and at times when he crawled along the sunken passage up to the door, some of the inmates would raise him up by putting their fingers into his nostrils, which grew and grew, while the rest of him did not grow at all. He had wretched fare, and was the laughing-stock of the whole company. At last his foster-mother got him a pair of boots, and sent him up into the hills, telling him to call out, 'Lord of strength, come forth.' Immediately there appeared to him an *amarok*, that is a monstrous and fabulous wolf, which twisted its tail round him and threw him down. As he lay he heard a rustling, and saw a number of seal-bones, like small toys, falling from his body. 'It is because of these bones that thy growth has been stopped,' said the *amarok*, which threw him down four times with the same result. The fifth time he did not fall, and went home running and jumping. Every day he returned to the *amarok*, and at last he grew so strong that even the beast could not overthrow him, and then it spoke: 'That will do, no man can now conquer thee any more, go home and keep to thy old ways; when winter comes then will be the time to show thyself; three great bears will then appear, and they shall all be killed by thy hand.' Home he went, and bore the mocking of the men, and the pelting of the girls and boys, as before, till autumn came. One day the kayakers brought home a huge piece of drift-wood, which was too heavy to be carried up to the house at once. At night Kagsagsuk stepped down to the spot, shouldered the log, and ran up with it to the house. In the morning all the men cried

out, 'Who ever could have done this? There surely must be a very strong man among us;' and the young men all gave themselves great airs, that each might be believed to be the great unknown strong man, the impostors!

Still Kagsagsuk remained unknown, till in the winter the three bears came, but no one ventured to run the risk of attacking them. 'Mother,' said Kagsagsuk, 'lend me thy boots, that I, too, may have a look at the bears.' She gave them, and added mocking, 'Then fetch me a skin for my couch, and another for my coverlet in return.' All the men thought him out of his wits, but he ran down to the shore, shouldering them on one side as though they had been a shoal of little fish. His heels seemed to touch his neck, and the snow sparkled like a rainbow before him. Mounting the iceberg, he seized the biggest bear by the paw, turned round for a moment to make himself 'hard' by a charm, and dashed the beast against the iceberg till the haunches parted from the body. Then he hurled the carcass down among the bystanders, bawling out, 'This was my first catch, now flense away and share.' They all thought the second bear would be his death, but the second and the third fared much in the same way, except that Kagsagsuk caught hold of the third by the fore-paws, and went swinging it round his head among the crowd, crying out, 'This fellow behaved shamefully to me, and this fellow still worse,' until they all fled before him. On entering the passage he gave his mother the two bear-skins, and ordered the meat to be cooked. Now every one asked him to enter the main room, but he only peeped over the threshold, saying, 'I really can't get across unless some one lifts me up by the nostrils.' No one dared to do so, till his old mother came and lifted him up. Every one was now very civil; 'Sit here, sit there,' they said, and offered him boots and breeches, and all the girls wanted to sew clothes for him. After supper, one of the inmates bade one of the girls go and draw water for 'dear' Kagsagsuk. She brought it, and he took a drink, and drew her tenderly to him, but all at once he squeezed her so hard that the blood gushed from her mouth; but he only said, 'Why, I think she has burst,' while her parents said,

'Never mind, she was good for nothing but to fetch water.' By-and-by the boys came in, and he called out, 'What mighty seal-hunters you will make;' at the same time seizing hold of them and crushing and tearing them to pieces. But their friends only said, 'It doesn't matter, he has only played a little at shooting.' Thus Kagsagsuk went on, putting to death all the inmates of the house till he had made an end of them. As for the poor who had been kind to him he treated them well, and shared the store of food laid up for the winter with them. Then taking the best of the kayaks, he roved up and down the coast to show his strength, so that all along the shores records of his great deeds are shown, and this is why the story of Kagsagsuk is believed to be true.

He was, in short, a kind of Eskimo Hercules or Grettir. One remarkable ruin on an island is said to be his bear-trap, referring to which the native relator adds, satirising the European love for collecting curiosities: 'I wonder why the King himself, who seems so fond of collecting rare things, has not taken one of those stones and carried it off in a ship.'

There is a grim humor throughout that tale. Another stigmatises a practice of which some have very unjustly accused the Eskimo. It was said of Igi-marasugsuk that he lost wife after wife, but nobody knew that he used to eat them and their children. At last he married a girl who had a younger brother; and one day he took his axe and struck off the boy's head, and then made his wife cook some portions of the body. She obeyed for fear, but when she was told to eat some of her brother she only made believe, and hid her share under the ashes. 'I really think thou art weeping,' said the husband. 'No,' she said, 'I am only a little shy.' Now, this cannibal's thoughts were set on eating her too, and to make her fat, he told her to eat nothing but reindeer tallow, and only to drink as much water as a shell would hold. So she grew so fat, that she could scarcely stir. One day he went out, and then she rolled herself off the ledge and so to the door and out of doors, into a muddy pool, and took a good draught. Then she felt less heavy, and was able to get up and walk. Re-

turning to the house, she stuffed out her jacket to look like herself, and, fearing her husband's return, she charmed herself into a large log of drift-wood, which opened and closed on her and hid her. The husband came back, and ran his lance into the stuffed jacket, and finding out what it was, followed his wife by her footsteps to the log, where the track failed, and he called out 'Wretch that I am; what a pity that I waited so long before killing her.' Soon after she heard him go away, and then she charmed herself out of the log and into a fox's earth, to which he again followed her, still bemoaning his hard fate that he had not eaten her. So she went on flying before him, and he bewailing himself, till she escaped, and fell upon folk to whom she told her story. They took her home, but she said 'Igimarasugsuk has eaten his wives and his brother-in-law, and he will be soon here to eat me. As he is very fond of good living, be sure you treat him civilly and well.' Sure enough he soon arrived, and she hid herself behind a skin curtain. The other inmates rose to meet him, and said, 'We hope thy people at home are quite well.' 'They are well, indeed,' he said. Then they served him up food, and asked him to play them a tune on the drum. 'Nay!' he said, 'but you ought rather to play to me.' So the master of the house seized the drum and began to sing, 'Igimarasugsuk, the cruel man who ate his wives.' At these words, says the tale, Igimarasugsuk 'blushed all over his face and down his throat,' as well he might; but the singer went on, 'and his last wife was forced to eat some of her own brother's arm.' Then the wife came forward, and said, 'No, indeed, I did not, for I hid my share under the ashes.' Then the company seized him, and his wife slew him with a lance, in blood revenge for her brother, and as she slew him she said, 'Dost thou remember thrusting thy lance into my stuffed seal-skin jacket?'

This is a story which shows in the plainest light the antipathy of the race to cannibalism; but, indeed, in the overabundance of seal- and whale-meat, the Eskimo have no excuse for that horrid practice, to which other savages have been driven by sheer necessity. How, for instance, were the New Zealanders to support life without resorting to can-

nibalism on an island, fruitful in few things except fern-roots, and on which the largest four-footed animal was a rat?

Again, in another story, two brothers lose their sister and set out to seek her; they cross mountain after mountain in their sledges, drawn by dogs, and at last found her. As she was gone before they were grown up they could only know her by a sign, and that was, that her hair was white on one side of her head. But they found her in strange company, combing the hair of a nasty-looking man, and this they saw by mounting the roof and looking down the venthole of the house. The customs of the Eskimo are not like ours. None of us could attract attention by clambering up to the roof of a house and spitting down the chimney; but that was what these brothers did in that strange land, and with immediate effect, for their sister gave the nasty man a push and bade him go out and see who it was that had come to them from afar. The man took his bow and went out, and then the brothers told him who they were and why they came, and he asked them in, and a large tub of blubber and bones was set before them, and they were just about to be happy, when, lo! and behold! they saw a human hand floating in the tub. 'We don't eat such food as this,' they said, but their sister and her children fell-to. 'Hast thou turned cannibal?' they said. 'This nasty fellow has made me one,' she said, and gave him another push. Seeing they were so squeamish, the master of the house, who, though a cannibal, was not a bad fellow, cooked other food for them; and, fearing that his neighbors would attack his brothers-in-law, sent out and cut all the traces of their sledges. This was done, as they supposed, but the traces of one sledge were uncut. After supper, the man said they had better be off. 'I will see you on the way till you have got a good start, and then I will give a shout, and you will see what will happen.' At parting he said, 'Now you know the way to our house, do come back and visit your sister.' Off they went, and when they were well on the ice, he cried out, 'The visitors are setting off.' In a trice the place was black with folk—some half-clad, some stark naked—but all making for their sledges. The travellers pressed on their dogs, but one sledge fol-

lowed and gained on them. Now their brother-in-law stood them in good stead; he pursued that sledge and slew the driver, besides a number of other people; and the last they saw of him was loading his sledge with the limbs of the slain—no doubt for his larder. It was long before the brothers reached home, and told the tale how their sister had turned cannibal, but they never went to see her again.

As marriages are much encouraged among the Eskimo, old bachelors are objects of scorn and mockery; and even when they repent, and change their state, things seldom go right with them. Once on a time there was such an old bachelor, who used to amuse himself at playing with the skulls of seals, calling them his children, and bidding them to be good boys. But finding this dull work, he went away up the country, and there caught sight of a great many women bathing in a lake. At this sight he stole up to the spot where their clothes lay, seized those of the prettiest, and then came boldly forward. As soon as they were aware of him all the women rushed to their clothing, and putting it on, were turned into birds and flew away. She only remained whose clothing he held, and he went up to her and asked her to be his wife. She said 'Yes; but only give me my clothes,' and he gave them to her, but he still held her fast lest she too should fly away. So she dressed herself, and he took her home and married her; but for some time he was afraid to go out in his kayak, lest she should take wing and fly away. At last she said, 'You may rely upon me, for I love you.' So he went out sealing, and they had two children and were happy. But when the children could use their legs, she took them out to walk, and bade them gather feathers, saying, 'Children, ye are akin to birds.' So when they had gathered enough, she tied a pair of wings on her eldest son, and he became a sea-bird and flew away; then another pair on his brother, and he flew away; and last of all she, too, took wings and followed them. When the old husband came home and found them gone, he was very sad, and followed them in his new kayak, and at last he met a man who, for the sake of a good axe, told him what to do. 'Go and sit

down on the tail of a salmon in yonder river, and when thou hearest the voices of children mind thou dost not open thine eyes.' The old man obeyed, and, shutting [his eyes, was borne by the salmon down the stream, and at last he heard the voices of children saying, 'Alas! our father is nigh,' and then their mother answered, 'Lo! we left your father with no wings to bring him hither;' but for all that the children said, 'Our father is come.' Whether the father now opened his eyes and broke the charm the story does not say, but he went on shore and up to a house with five windows, and, going in, he saw that the inmates were all women, except one man with a pug nose, who sat close to his wife, and kept on saying, 'Wilt thou not marry me?' but all the answer he got was, 'No, I have already got another husband.' The inmates now began to go out, and at last only the old man and his wife and the pug-nosed man were left. Next, the pug-nose went out, and then the old man tried to take his wife back, but she quickly followed the others out, and when he pursued her she and all the rest of the women became changed into gulls, and the pug-nosed man was changed into a wild-duck; and when the old husband turned round he saw that the fine house was nothing but a gulls' nesting ledge.

Here at least in this homely and somewhat confused form we find a story which has made the round of the world. These gulls are the representatives of the Swan Maidens in the Edda, of the Fair Melusina in Romance fiction, and of the seal wives in Orkney, who on regaining their skins desert their land husbands and swim off to join their old seal husbands in the sea.

The duty of the blood revenge is inculcated in the following story:—The parents of Namak were both killed when he was a child by their housefellow, but a man took pity on him and adopted him. This foster-father was never tired of worrying him and trying to frighten him, to test his spirit. Sometimes when he was asleep he would shout in his ear, 'Namak, thy enemies have come to kill thee too.' Sometimes, again, he would call out, 'How forgetful Namak is! Here are his parents newly murdered, and he is forgetting all about it.' As he

grew up his foster-father gave him a sling, bidding him practise with it. So Namak practised slinging and soon got very skilful. At the same time he grew stronger and stronger, and was ever thinking of his wrongs, and at last he said his sling was not strong enough, so his foster-father cut him another out of the very thickest sealskin and left off gibing at him, for he was afraid of him. Others too seem to have got afraid of him, for it was reported one day that Namak's enemies meant to go further north in the spring. This made him mad, a feeling which his foster-father fed by calling out when spring came, 'Namak, thine enemies are making ready to depart.' But it was a false alarm, though for all that Namak seized hold of a large seal, turned it over with one hand, and cut himself a new thong for his sling. That was proof enough how strong he was. At last the hour came about which his foster-father had so often cried 'wolf.' 'Namak,' he cried, 'thine enemies are departing,' but Namak would not stir, he had been too often cheated. At last he heard the rattle of their tent-poles as they pulled them down, and then he took his sling and lay in ambush on the shore behind some great heaps of stones. As the first boat was launched 'bang' went a big stone through it, and it sunk with all the crew, who cried, 'Alas! alas!' Another boat came to the vessel, that too he sunk, and a third with all on board. One boat was saved, for it had pushed straight out to sea instead of skirting the shore. All which may be seen in the most original and graphic engraving by a native artist of the slinger hurling stones from his mighty sling while the boats are foundering and the unhappy crews struggling in vain amid the waves.

Now Namak's mind had a little peace. He married and had a son, but it galled him to know that some of his enemies had escaped and were thriving in the north, and so he taught his son to be a good kayaker, and then they both set off to look their enemies up. As they rowed along the coast their constant inquiry was 'Where are Namak's enemies?' and the answer always was, 'Farther north.' At last they reached the spot, and asked the people who came down to meet them on the shore, 'Where are Namak's ene-

mies?' This was a question which the inmates of the house were too polite, or perhaps did not care, to answer. They retired into their house, and Namak and his son set up their tent on the shore, and kayaked and did the best they could for themselves, but they were never invited into the house. At last it blew strong one morning from the south-west, and all the kayakers stayed at home. Then the word was passed to their tent, 'Every one wants to see Namak.' He was ready in a moment, and his son went with him. Inside they found meat set for two, of which the son ate little, but Namak went on eating till he had finished the dish.—Here we must take our readers a little into our confidence, and tell them that it is usual for those who enter a Greenland house to take off their upper garments, a custom which we are sorry to add does not imply the use of under garments. In the engravings of Eskimo interiors all through this volume, the inmates of a house, men and women alike, are naked to their waists; boots and breeches are what may be called the undress of Eskimo domestic life. But to return to Namak:—After he had eaten his meal in silence, one of the enemies proposed a series of games, saying, 'Ye ought to try your strength at pulling the thong first,' and with these words he pulled the thong fitted with walrus' teeth from under the bench, and threw it on the skin on which the champion had to sit on the floor; the game being intended to try the strength of him who was able to pull the other over and off the skin. But Namak said, 'This is child's play,' and with these words he took up the thong, tore it asunder, and threw the bits down on the floor. Then another proposed to try strength with him, by hooking arms and trying to pull each other across the skin. So Namak sat down on it, and they all tried, but there was no one who could so much as move his arm in the least.—Of all which we again have a charming engraving, representing Namak and his son naked to the waist, and surrounded by their enemies in the same primitive garb. At last the son went home, and Namak stayed behind, while his enemies went out. Then he slowly put on his outer coat, *more Hibernico*, expecting an attack, but none came. At last in the spring, having

sufficiently dared his enemies to attack him, he and his company returned south. This we trust our readers will think a very characteristic story, and to it the native writer has added the following curious remark:—‘It is generally supposed that if Namak’s foster-father had not continually excited him, he would scarcely have grown to be so immensely strong. People say that among our ancestors before they became Christians, there was no lack of strong men, because their *bad consciences* induced them to cultivate their strength. Nowadays since people have turned Christians and have no bad consciences, there are no strong men among them.’ On which we only remark, *O! fortunati nimium!*

We have now nearly said our say about the Eskimo and their manners, customs, and tales; but a very interesting question remains, to which we must devote a little space. It is this—how far these customs are purely Eskimo, and whether they have not a dash and smack of those of another race. Dr. Rink, we know, will not hear of any such heresy, and says expressly, while he admits that the inhabitants in Southern Greenland are of mixed descent from Eskimo and Northmen, that the latter have not left the slightest sign of any influence on the nationality or culture of the present natives. In spite of this, we are bound to say that there is ample evidence of such an influence, and that it is supplied by the learned doctor himself in this very volume. In the first place, what are those verses by which offenders are shamed into propriety but mere copies of a custom of the Scandinavians, whose habit it was to recite them at great gatherings of the people? More than this, the very name by which they are known in Greenland at this day is not an Eskimo, but a Scandinavian word. Every reader of the ‘Egils Saga’ knows what a *nith* song is. The word is not Turanian, but Aryan, and is akin to the ‘*niddering*’ of the Anglo-Saxons. It means a mocking, spiteful song, such as would be likely to injure the reputation of him against whom it has aimed. In the same way the ball-play of the Eskimo, which frequently occurs in these stories, is nothing but the hand and football of the Icelanders; while, as to those trials of strength which we have seen in ‘Na-

mak’s Story,’ they are literally the same, down to the custom of sitting or standing on a skin, as those found in Icelandic Sagas. There is an Icelandic proverb which talks of tugging a rope against a strong man, and the practice of testing strength by locking arms was also common among them. As for the *tupilak* of these tales, it answers exactly to the ‘*sending*’ of the Icelanders as described in Arnason’s ‘Popular Tales of Iceland.’ And if we look a little closer at the history of Greenland, we shall see that *a priori* this was likely to be the case. There is no doubt that when Eric the Red colonised Greenland, about the year 1000 of our era, he found the climate less rigorous than it now is; and so, in a comparatively short term, sprung up tidy farms and flourishing villages, not only along the West but also on the East coast, which is now a howling wilderness of ice and snow. We know that on the egg-sucking principle wise men have recently denied that the Icelanders ever colonised the East coast at all; but when they called it *Eystrabygd*, they meant *Vestrabygd*; but like the sparrows who would not stay to be pelted, we do not think the Icelandic colonists were such fools. We think when they said East they meant East, and that they colonised the East coast down to Cape Farewell, as well as the West up to Disco. So long as the communication with Iceland and still more with Norway was kept up, the colony flourished and even stretched out its arms and discovered part of the North-American coast. But besides a better climate than that which exists at present, Eric the Red and his companions found something else in Greenland which also exists at present in that country. These were the Eskimo, whom, however much their strength and prowess is lauded in these Tales, there can be no doubt that the hardy Northern sea-rovers regarded with contempt as an inferior race. In fact, they disposed of them in a word and called them ‘*Skrælings*,’ that is, ‘shrivelled chips of creatures.’ So things went on for about three centuries; but at last, as the old sea-roving and trading spirit died out in the North, fewer ships from Norway and Iceland hailed for Greenland; the cold at the same time increased in Greenland, as it undeniably has in

Iceland, and the colony languished. But what was death to the Northmen was life to the Skroelings. They much preferred winter to summer, frost to sunshine, and seal-meat to rye-bread. They waxed while their enemies waned, grew troublesome, cut off settlements to the North, and were engaged in an incessant struggle with their enemies when, early in the fifteenth century, the last ship brought news of Greenland to Norway. It was not for two centuries afterwards that the curtain again rose on Greenland, when it was rediscovered by Davis at the close of the sixteenth century. At that time the struggle had ended in the triumph of the Eskimo, who were supposed to have made short work of the hated race of the *Kavdlunait*, or 'foreigners.' But here, as in other cases, the conquering race merely absorbed the conquered, and intermarrying with them, amalgamated the two races and fused them into one. The case was much the same with the Saxons and the Romano-British, and the

Picts and Scots. It is a very large order to cut off a race to the last man, especially in a country where men are far more useful alive than dead. It is only in China and in very overpeopled countries that man is a drug, and that prisoners and captives are ruthlessly exterminated. No doubt the Northmen had to suffer much during the struggle; but as soon as it was over the good easy nature of the Eskimo was ready to receive them as friends and brothers. In this way many of the customs and traditions, and a portion of the vocabulary of the Northmen, passed over to the race into which they had been fused and lost. We have now said our say, but we hope we have said enough to show that both for themselves and their traditions the Eskimo are a very interesting people, and that Arctic voyagers might fare farther and fare worse than if they came upon the house of 'a very rich Eskimo family.'—*Quarterly Review*.

BUNSEN AND HIS WIFE.

BY LADY VERNEY.

THE death of the Baronne de Bunsen, aged eighty-five, which has lately taken place at Carlsruhe, should revive the interest in her memoir of her husband, which will long be remembered as one of the very best books of its kind.

Hers was the appreciative, not the original mind, and she almost carried out the ideal in "The Princess,"

"She set herself to man,
As perfect music unto noble words."

She was one with her husband in thought and feeling, tastes and actions; she enabled him to carry out his objects by her sympathy and by her active co-operation; she took upon herself the vexing petty cares of life, and left him free to follow out his political and literary career. Yet she was no "housewife," but shared all the best part of his mind upon all occasions. How much individual intellectual power, good sense, and insight into character she possessed, may be seen in the two large, thick volumes, wherein, with a tender reverence for her husband, in whose life her own was so completely merged, she made his character known

to a circle far wider than even that in which he moved during his lifetime.

The book is peculiarly interesting to us as the history of one who, though a stranger in the land, and preserving his own individuality quite unbroken, yet identified himself with the best of English life in a manner which no other foreigner has ever done before or since.

Our pride of race, the supercilious habit of looking down on all other nations, as our inferiors in religion and politics, our shyness, exclusiveness, and insularity—our want of facility in other languages—combine to make a barrier into real English society which hardly any outsider from other lands finds it possible to pass. And although this must be the case more or less in every country, so that of the thousands who traverse Europe to and fro, the number of men and women in each generation might almost be counted on one's fingers who have become really intimate with the French, German, or Italian upper class, yet in England the difficulty created by the want of a common language

makes the bar far greater than elsewhere. As Lord Houghton once said in a paper upon education, scarcely any English *man* speaks even French sufficiently well to enjoy talking it, and other tongues are still stranger to his lips. It was the accident of Baron Bunsen having married an Englishwoman, and using her speech as fluently as his own, which first opened the door for him into that jealously-kept sanctuary of English social life, which his sympathy with the nation improved to the utmost. It is this which makes the book so valuable—to see ourselves as others see us; not through the eyes of what we might call “an insolent Frenchman” or “a dogmatic German,” whom we could comfortably put aside with the feeling that “he does not understand us,” but by one who touched all things as if he loved us, with a gentle sympathetic reverence for all that was good, and a very kind tenderness even for our faults, which make his strictures tell home.

Bunsen's was a curious life of failure in the objects upon which he had set his heart. The gods shaped his ends to entirely contrary courses to those which he had rough-hewn for himself. He abhorred diplomacy, and his life was to be spent in little else. He preferred the learned leisure of a literary and artistic career, and he was condemned to the rush of London society as part of the duties of his position. He had a tender affection for his own country, yet during his lifetime he was almost singularly without influence in Germany, except through the personal friendship of the King, while he caused Prussia to be respected among nations in a manner which none of her internal arrangements before Sadowa and Sedan could have effected. He was not a great diplomatist, yet no ambassador ever took such a position before in England. He was anything but a great writer, yet he had more influence on his generation than many who were both, by sheer force of straightforward honesty in thought and action, true love of God and man, and sympathy with what was highest in thought and feeling wherever he went. It is to the honor of the world that he should have been so successful, for he had none of the adjuncts which generally raise men to fortune—nothing

but excellence, talent, and enormous industry.

He belonged, and prided himself on the fact, “to the kernel of the German nation, the cultivated and cultivating class of society;” and the record of the self-denial exercised by him and his parents in their poverty, and the sacrifices required to obtain the education which was like bread and meat to him, are exceedingly touching. At length, however, he obtained work at the Göttingen University, which enabled him to live independently while he pursued his own studies without interruption.

The “statement of his plan of intellectual work,” laid before Niebuhr when he was only twenty-four, takes one's breath away by its extent and the enormous labor which it contemplated as possible. He “determines to combine three forms of contemplation, in order to interpret the problems of human knowledge, *i.e.* philology, to arrange and treat individual historical facts; history, to discover their connection from their earliest development; and philosophy, to establish the principles by which philology and history investigate facts and laws of development, and mediate between fact and ideal conception,” whatever this last may mean.

He wishes to “acquire the whole treasure of language in order to complete his favorite linguistic theories,” to show the historical connection of German and Scandinavian heathenism with the East (“a study especially interesting as showing the history of nations”), and desires “to bring the language and spirit of the solemn East into communion with the European mind.”

To accomplish this gigantic plan he went to Paris to study Persian, intending to follow it up with Sanskrit; while in order to acquire the more modern languages of India, he proposed to spend three years at Calcutta. The material part of his scheme he hoped to carry out by joining an “Oriental journey of linguistic research,” which he trusted, under the auspices of Niebuhr, would be sent out by the Prussian Government. Meantime he earned money to support himself by teaching; undertook to accompany a young American on his travels, and even went as far as Florence with a

young Englishman; but both plans dropped through, and at length he set forth on his own resources to meet Niebuhr, the ambassador at Rome, and his old friend Brandis, secretary of legation, through whom he hoped to obtain some opening for work. His enjoyment of the new life is delightful even to read of. The art, the antiquities, the climate, the exquisite beauty, the leisure for study (for teaching evidently bored him infinitely), the congenial society, all filled him with rapture. "There is but one Rome and one Niebuhr," says he. He plunges into a whole polyglot of reading: Plato, Firdusi, the Koran, Dante, Isaiah, the Eddas, all in their own tongues. A different influence, however, was at hand, more charming than Firdusi, more interesting even than the Eddas. He falls in with an English family with three daughters; and very soon declares how he had "always thought that his old love, his plan of study and travel, would have prevented the devoting of his whole heart and being to another and human bride." Woman, however, was stronger than learning and carried the day.

The courtship was short, but they had ample means of becoming really acquainted with each other's characters and tastes, in the easy, pleasant intercourse of Rome, and during their visits to all the great objects of interest, where the learned young German was an invaluable companion. The natural objections against a marriage where the bridegroom was absolutely penniless were great, but Niebuhr promised his assistance, and declared that Bunsen was certain to succeed in life; and the young couple were married in June, 1817.

Then comes a paradisiacal interlude at an "exquisite villa at Frascati," "the terrace of which looks down over vineyards, fields of maize, olives, fig-trees, and a long avenue of cypresses and pines." From the balcony of his room they "can see the Mediterranean in the distance, the beautiful Sabine mountains to the right, forming a semicircle round that end of the plain, and Rome in the centre. Springing fountains rise out of marble basins in the garden, most refreshing in this hot weather (July), pots of myrtles and flowers, blue skies," "all fair sights and sounds" are about them. Here he added to his other interests a

study of the Bible with his wife, but felt a little uneasy in the midst of his happiness at the thought of what his friends would say to his giving up India; still after all, he reflects, "it was only a means to an end," and he "hopes without misgiving to accomplish what is necessary" in other ways. In October they returned to Rome, and established themselves in a suite of great, bare, half-furnished rooms in the Palazzo Caffarelli, on the Tarpeian rock; where once Charles V. was said to have been lodged. "The prospect has not its equal for beauty and interest, extending all over the city of Rome; the Forum on one side, the Capitol behind; but it is little known, as the Romans are too lazy to climb the hill on which it stands."

Here they passed the next twenty-two years—a delightful life, combining more elements of a rational and useful career with the satisfaction of both their tastes, for art and beauty and knowledge, than often falls to the lot of men. In this prosaic world, however, food and clothing must somehow be supplied, and, in spite of his extreme reluctance, he was gradually drawn by this necessity into the diplomatic career. During the illness of Brandis he undertook the post of secretary of legation, "but I would on no account remain in the diplomatic career," he still says. "I detest that course of life too much, and only look on it as a means of becoming independent. The commonplace life of public business is so pitiful compared to a course of philosophical and literary labors." He "wishes to be a professor," he writes again and again. It was another curious instance of how his own plans of life were overthrown. Step by step he became entangled in diplomatic business, the charm of the society of the chief, Niebuhr, seeming to have had a great share in determining his final resolution, as he constantly alludes in his letters to the kindness of the great man, and his delightful intercourse with him. He continued to read and write on every conceivable subject, and soon undertook to prepare a joint description of Rome with Niebuhr, "he for the ancient, I for the modern part, especially an essay on ancient Christian churches," as the history of the Basilicas was peculiarly interesting to him; while he found time for

trifles, such as the "Athenian law of inheritance."

The wealth of antiquarian interest in Rome, ever new, ever suggestive, was to him a never-failing delight. "I have hardly known a day ever since we have lived here when something has not been discovered, or some curious question cleared up," he once said. The labor, however, of preparing his share of the Roman work was great, from his extreme conscientiousness and desire for accuracy, while the time had to be taken from his short intervals of rest from diplomatic work.

There follows a visit to Niebuhr at Tivoli, where he and his wife remained for some time, "the happiest in his life." He rejoices that "Fanny should really become intimate with the simplicity of greatness and inexhaustible animation of their host, his interest in all that is good, true, learned, and wise; the richness and charm of his conversation, which commanded every subject, and the high-minded absence of everything trivial." "His great personal kindness to Fanny and me" is continually alluded to.

Then follows a whole encyclopædia of subjects which they discussed together. They had been talking of the Athenian orators.

"I begin to understand the justness of Niebuhr's democratic tendency with respect to Athens, which formerly seemed to me to do wrong to Plato and others. When one becomes better acquainted with the insolence and cruelty of the aristocracy of Athens, there seems to have been no alternative between a democracy such as Demosthenes desired and the acceptance of Alcibiades as *tyrannos*."

"Niebuhr has given me authentic data showing how little Malthus' facts concerning the proportionate increase of population and production really prove. Neither Germany, Sweden, Denmark, Italy, nor France are nearly so populous now as in the middle ages, some parts of Germany not even so much so as before the Thirty Years' War. This is caused by the prevalence of epidemical disorders even more than by wars. Another series of facts regards the rates of increase of population to extent of country and the moral state of society at the time."

He winds up with finding out that the deeper he goes into history and politics the more he feels that he must go to England to inquire, investigate, and observe.

He begins to put aside the study of language for a time: "all separation between knowledge and action is unsound and enfeebling; one must learn what exists, what may be done, how best by system and principle this can be carried out; and then, each according to his ability, to strive to accomplish it;" and this may truly be said to have been his aim through life—to strive by every means in his power to find out what was true, and then earnestly attempt to put it in practice. "Later," he says, "comes a life and time for contemplation, and the inquiry into the past returns with new force."

His life gave him one great advantage: by dwelling so much in foreign lands, and with men of such various nationalities, he was freed from that "belief in conventionalities," that "pedantry in raising things external to the rank of duties," that "almost religious strictness in the observation of forms," which men, and still more often women, who live in a set, so often fall into, and which sometimes vexed his soul, particularly among the English.

"We live, he writes to his sister, "almost entirely out of what is called the world. Sunday and Monday evenings we read the Bible with the Prussian chaplain, on Thursday Niebuhr receives, Monday we meet for singing of old church music."

His interest in music continued to be strong throughout his life; at first he only cared for it when accompanied by words. Art, indeed, at this time was interesting to him only as expressing thoughts and feelings, the technical part was of little worth to him, and his shortsightedness prevented much of the pleasure afforded by pictures and architecture. But later on he has found out that "music possesses the high privilege of showing how much [there is, intensely affecting the human soul, that thought cannot grasp nor language utter." A palimpsest MS. on music, which had been found at Pompeii, sets him on studying the whole subject in ancient and modern times with a special view to the reformation of hymns in Germany "as the first step to a revival of Christian worship." He was much assisted in these studies by the Papal choir, whom, as a very rare favor, he persuaded to

come and sing at his house, chiefly selections from Palestrina for four voices.

"The 'canto fermo' or plain chant was imposed by a special law of the Council of Trent on the private chapel of the Pope as the only style suitable to the solemnity of the Papal presence. This was the basis of the music of Palestrina and Allegri, and was founded on the scanty fragments of the musical system of the ancient Greeks, which have been handed down to us."

He was delighted with a litany to the Virgin, sung on the eve of her festivals by the Roman peasants in the Piazza Madama, and dating from the tenth century, the only one remaining of a class of popular devotional musical exercises which had been broken up by the French occupation at the time of the Revolution.

He then undertook the examination of above 2,000 hymns, and selected 150 "as a step towards a common form of Christian worship," "a plan which Luther had pointed out, but did not execute." In his comparison of different liturgies, he says—

"The English is constructed from a grand point of view, adapted with much wisdom to the wants of the people at the period it was put together, and represents Christian worship far more thoroughly than anything I have seen in Germany, Holland, or Denmark."

He wished to "make the historical treatment of the conception of the Lord's Supper the principal work of his life in future years:" "the spiritual priesthood of all Christians, the true idea of self-sacrifice, the continuous spiritual giving of thanks which became afterwards the sacrifice of the mass." One of the great pleasures of this period (1821) to Bunsen and his wife "consisted in the study of the creations of Thorwaldsen's genius;" they found him one day in the act of finishing the statue of Mercury, and he told how a sitting figure in perfect repose, but on the point of action, had occurred to him as admirable, and that he had just hit upon a subject to furnish it with meaning, "Mercury having lulled Argus to sleep, and grasping his sword, about to strike him, watching lest the hundred eyes should open again." He had lately finished his colossal statue of Christ for Copenhagen, and said he feared he must have reached his best and be about to decline, for "I have never before been satisfied with any of my works; I am

satisfied with this, so I must be on the road to decay."

A fatal Roman fever broke in on the happy family life: they lost their eldest little girl at Albano, and there is a touching account of Niebuhr's extreme tenderness for them in their grief; both father and mother caught the disorder, and Bunsen suffered long and acutely.

In the winter of 1822 the King of Prussia and his two sons arrived in Rome, and Bunsen was deputed by Niebuhr to "explain Rome" to them. This was his first acquaintance with the prince, who returned alone in the following year, and whose friendship with Bunsen continued unbroken to the end of his life.

Through the great rooms of the Palazzo Caffarelli now passed all who were worth knowing of every nationality, and the catalogue itself is almost a history of the time. Dr. Arnold, Stein ("whom he felt to be his king"), Lord Sandon, Lord Dudley Stuart, Pusey, the Chevalier Neukomm, nominally *maitre de chapelle* to Talleyrand, who hated music but liked his company; the Duc de Luynes, with his knowledge of antiquities; Thirlwall, and later, Gladstone—men who had no time at home to enjoy themselves, but were only too happy to study Rome in company with one so willing and able to communicate knowledge pleasantly as Bunsen.

"Lord Colchester has arrived, in a most disconsolate state of mind, declaring that the English constitution would not last sixty years longer;" "indeed the times we live in," says Bunsen himself, in a letter of 1821, "are most unsatisfactory; men's minds are unfixed, lost in self-interest, sentimentality, and self-contemplation. Niebuhr, as he grew older, had lost his love of republics, unless at the distance of 2,000 years. He had become more conservative and French in his ideas, while Bunsen was gradually drawing nearer to England, which he now hoped to visit. Instead of this, when at length Niebuhr threw up his post as Minister in 1823, Bunsen, much against his own wishes, agreed to remain till a new Minister arrived, "but only till then. What can I expect here but splendid poverty? receiving thousands only to expend the money on outward appearances and honor." "I have ambition, but it must be

satisfied in the honor of my own choice. A man should so love his profession as to accept with indifference all events proceeding from it."

The burning of the magnificent church of San Paolo fuori le Mura, with its mosaics of the ninth century, which Bunsen had greatly delighted in—"its beams of cedar of Lebanon above a thousand years old, and the columns of violet marble taken from the mausoleum of Hadrian"—"was an event even in the eventful year 1823." The old Pope, Pius VII., was dying at the time, and a strange account is given of the funeral, "according to long fixed custom," showing the sort of sentiment which had been inspired by the Pontiffs beforetime among their people:—

"His remains lay in state, first at the Quirinal, and then at St. Peter's, where they were taken by night, not with chanting and a great attendance of clergy, but with troops, pieces of artillery and ammunition-waggons, and no light but straggling torches in the narrow streets, where the moonlight could not penetrate—these precautions dating from the times when they were necessary to defend the corpse of the pope from being attacked by the populace. At the funeral of Paul IV., a Caraffa, a band of the people, having failed in their attempt to attack the remains, knocked off the head of one of his statues, and after parading it about the streets, threw it into the Tiber."

Then follows the election of the new Pope, the cardinals walking in procession to the conclave in the Palace of the Quirinal, preceded by the attendants who were to be shut in with them, and the singers performing the "*Veni, Creator Spiritus*." The votes of the cardinals were collected by ballot twice a day, and burned at once, till the requisite majority was obtained. The small thread of smoke was carefully watched by a crowd of idlers, to know whether the end was come. The pasquinades, the rumors "containing an acrid venom which caused it to be supposed they were concocted chiefly by the lower clergy," are mentioned, with many curious details which we may see repeated any day—the nominees of the three Catholic Powers being at last all quietly put aside by the Italian majority of cardinals, and an Italian bishop, Leo XII., selected.

The new Pope was carried with the accustomed state to St. Peter's, "and actually seated on the high altar, to be

adored," the literal expression used. The Russian Minister was much scandalized, and said, "*Je suis schismatique, et je n'ai pas le droit de juger des affaires Catholiques, mais ce qui me paraît étrange c'est que le Pape ait posé le séant là où l'on place le Seigneur.*"

Not long after this period Bunsen was made Prussian Minister, a post which he accepted with many qualms, and the fatigue of which was much increased by having for some time no one to help him but his wife in the clerical work of the legation. He much felt, too, the want of the rest of Sunday, "an institution which does not exist at Rome."

His position seems to have been complicated by the jealousy of him and his influence over the King felt at Berlin; his trusty Fanny complaining of the "misapprehension of that truly German heart in his own country." He admits however, himself, after one of his visits to Germany, that "the conception of one's own country becomes more and more ideal in absence, and finally untrue to fact." He was shortly after summoned to Berlin, where his visit was, nevertheless, a success. The King was very gracious, showed much interest in the antiquarian discoveries made at Rome, and discussed at great length, and after Bunsen's own heart, "the best kind of public worship and the right ideal of a Christian State." He remained away six months, and the honor done to him in his own land rejoiced his wife's inmost heart, when he returned to his post evidently much refreshed. His affection for Rome was deep—"It would indeed be hard to me to leave the metropolis of the world; and all other towns are villages and *parvenues* compared with this queen of the earth." There are a page or two at this point which evidently intimate a great deal of inconvenience and even suffering to Madame de Bunsen herself, very gently hinted at. Bunsen brought his sister from Germany to live with them. She was thoroughly ungenial in every way, and the seven and a half weary years that she spent with the family were indeed "one long mistake."

Again comes the record of the hosts of interesting people from all countries who appeared in his *salons*: "Lord and Lady Hastings, returning from their regal

position in India; Champollion and his hieroglyphics; Madame Recamier, with the old charm lingering about her; Count Montmorenci, one of the most constant of her adorers; Cardinal Cappacini, then a Minister of the Pope's, "a pleasant, lively old man, who was fond of telling how he had been sent to England at the time of the peace, and had positively given the Pope's health at a public dinner, which was received very well, such was the general good humor. "Everything," he said, "was charming in England, except those black birds that fly about the high trees"—the rooks. Mendelssohn, then only a lad of twenty, is described as one of the "most amiable and attaching of human beings," deep at that time in the study of chorale music. "The rare charm of his mind and character is shown in his letters," and Bunsen's feeling towards "one so bright and pure was as to a son."

Each winter has its glimpses of pleasant society—in 1828, Thirlwall, St. Aulaire, Dr. Arnold. Chateaubriand had just arrived as French Ambassador, and Bunsen complains of his "uneasy vanity, wrapped up in himself and in the desire of producing an effect." "One evening in his own house, and in a room full of guests, he stood for some time, rapt, with his eyes fixed on the ceiling."

It was perhaps with some of the same feeling that he once observed to Bunsen (it was at the funeral of Leo XII.) "that as regarded Catholic emancipation in England, although he rejoiced at it for the sake of human nature, he regretted it as a Catholic, since it would do harm to the Church."

The times were full of anxiety to Bunsen:

"This age," he says, "is one of relaxation and lukewarmness, and yet what great things are demanded of it. The events are great and the men are small, the fermentation of change goes on—prejudice on one side, narrow-mindedness on the other; one striving to stave up the crumbling past with unsound props, the other to build anew without foundations."

"You think," he writes to Dr. Arnold on the Reform agitation in England, "that the principle of power, according to the majority of a population, is fraught with evil."

The French Revolution of 1830 had a strange effect upon Niebuhr. He was in a fever of alarm, and seems to have

thought that all Europe would shortly be in flames. He was furious with England for entertaining friendly relations with France, and talked of "the alliance of the Tiger and the Shark." He died the following year, having almost received his death-blow from his extreme agitation.

The household at Palazzo Caffarelli was to him, however, to the last a source of great pleasure. In a long and affectionate letter to him, Bunsen says:—

"My position is all that I could wish, more advantageous than I ever could have expected. To remain in the Capitol is essential to my happiness. . . . Our happy condition is owing to you, and our thoughts turn naturally to you as its author."

"Nothing can replace Niebuhr to me," he declares fervently after his death. In 1833 Walter Scott is mentioned among their guests; Augustus and Julius Hare, Tourgueneff, and the Grande Duchesse Stephanie, daughter of Hortense Beauharnais, one of the few relics then left of the Napoleonic dynasties.

In the same year he made an expedition with his wife and children to see the Etruscan tombs near Veui, which had just been discovered, and which interested him extremely. On one occasion at Corneto when an opening was made in the brickwork, the first who looked in "saw for a moment a figure in full armor, lying on a bier; but as the outward air entered, it vanished with a cracking noise, and nothing remained but a heap of oxidized metal round the bones."

He strove, and successfully, to keep up all his old interests, but "life is an art; to carry on public business without giving up study." "Power is one among the means of success, but only the use of the right means has a blessing on it."

In 1834 he is receiving Lord Ashley, and hearing much of schools, and is reading Newman's "Arians." "Oh heavens! what a book!" he ejaculates, and even then complains of "the dreadful hankering after papism" of the great convert of the future.

Very tedious negotiations were going on at this time between Prussia and Rome on the subject of mixed marriages and the forced attendance of Catholic soldiers at Protestant worship, a piece of intolerance which Bunsen only persuaded the King to give up by a *coup de main*.

Towards the end of the following year the cholera broke out at Rome, and Madame de Bunsen's description of the utter disorganization of society under the terror of it, the extreme barbarism of the "chosen people," their ignorance and cruelty amounting to barbarity, and the low state of feeling at the heart of Christendom, is extremely curious. There was almost an insurrection to prevent hospitals from being established. Every one, as long as he was not attacked himself, "considered every cholera patient as an excommunicated being," of whom it mattered not what becomes. Twelve thousand people died of it. The rumors of poisoning were as rife as in the middle ages, and wretched people accused of the crime were assassinated in the streets. An English teacher was pursued and killed after receiving eleven stabs from poniards, while the Pope shut himself up in the Quirinal, and refused to allow his own physician to attend any cholera patients for fear of infection to himself.

In 1837 a visit to England was arranged, and Bunsen's enthusiasm at the idea is pleasant to read. "I can scarcely master the storm of feeling in thinking I am on the direct road to my Ithaca, my island fatherland, the bulwark of religion and of civil liberty."

His time with us was a great success; he was received at once as an old friend, and at once entered into the enjoyment of all that was best among us as by right. It is curious to mark the level to which the tide of thought had then reached. Arnold's interpretation of prophecy, "that the writer is not [a mechanical instrument in the hands of the Spirit," seems to have created much opposition. Prichard's book upon races was another bone of contention.

One of Madame de Bunsen's sisters was married to Lord Llanover in Wales, and to their house Bunsen, in company with Lepsius, went down to give the prize for the best Welsh essay at a grand Eistedfodd, then a novelty and an event.

He saw a great deal of Gladstone at this time (1838), and calls him "the first man in England as to intellectual power. He has heard higher tones than any one else in this island. His book" (which he does not much like) "is far above his party and his time, but he walks sadly

in the trammels of his Oxford friends in some points." Amidst his other changes of thought, it may probably still be said how much his Oxford training clings to Gladstone, whether for good or evil.

In the busiest seasons Bunsen never gave up the thread of his family life, and shared his day's work as much as possible with them. His daily Scripture reading, ushered in by one of his beloved hymns, always began the day, and one of his many touching tributes to his wife as to her share in their past and present was written in this year. "The load of our earthly toil has increased upon us, and its principal weight is thrown upon your shoulders." "You are turning singly and alone the heavy wheel of life's daily work, while I have been refreshed by nature, art, and the study of human nature." But when working with and for him no load seemed heavy to her.

He was much struck with the power of the elevating and buoyant atmosphere of English domestic and public life, although "the deficiency of the method of handling ideas in this blessed island" is sad in his eyes.

"The great national existence, such as the English people alone have at this present time, is grand and elevating of itself. The power of thought belongs to us (the Germans) in this day of the world's history. . . ." There is a regret in the ring of the passage for the political state of his own country. He attended the opening of Parliament, and was "more and more struck by the great position of a Minister in England. I heard Lord John Russell speak," and felt "that here man was in his highest place, defending the interests of humanity with the wonderful power of speech." "Had I been born in England, I had rather be dead than not sit and speak among them!" He breakfasts at Sir Robert Inglis's, meeting Sandon (Lord Harrowby) "with the old good face," Arnold, and Lord Mahon, and another day Gladstone. "This man's humility and modesty make me ashamed," he adds. The little touches of character are very interesting. At a breakfast at Mr. Haliham's he sits between the host and Macaulay, "who was evidently writing the article in the *Edinburgh* on Gladstone's book; he spoke with all the power of his mind (or rather *esprit*) on

the subject. He is the Demosthenes and Cicero of the Whigs." Lord Mahon, Kemble, Empson, and Philip Pusey were there, the conversation very lively and instructive. They said that O'Connell cannot be eloquent unless greeted by cheers from the opposite side; he is heard now in silence, and becomes weary and tiresome. Then comes a literary breakfast at "Milnes'," another at Bishop Stanley's, and a lecture of Carlyle's. He goes from a meeting at Crosby Hall, where he sees "his favorite saint, Mrs. Fry," to a dinner, where he meets Dr. Pusey, "whose feeling against the Low Church and Calvinism is almost passion."

A sermon from Maurice at Gray's Inn impresses him exceedingly. "He does not read the prayers, but prays them with an intensity of seriousness which would make it hard not to pray with him." The remembrance of a bit of what now may be called almost fossil bigotry is revived when he relates how "Buckland is persecuted for asserting that fossil beasts and reptiles were pre-Adamite. 'What open infidelity! Did not death come into the world on account of Adam's sin?'"

His delight in the great oratorios at Exeter Hall is extreme. "Only in England is the Handelian tradition in real existence."

He was amused and interested by the scene at Oxford, when he received an honorary degree, and met many of his friends, Arnold among others, whose health gave him much uneasiness. "He will sink, I fear, under his work; he ought to be given a deanery; there are no such professorships where he could take refuge as in Germany." But Arnold's day of recognition did not really come until after his death, and when his life had been explained to the world by his younger friend, in that singularly beautiful memoir which has already become almost a classic in English literature.

Bunsen's brilliant visit, however, to England soon came to an end, and in 1840 he was sent as envoy to Switzerland.

He passed through Paris on his way, "an intellectual oasis in that Gallic desert," as he calls it; saw Bournouf, and had much talk on Egypt, and was after-

wards occupied in his retreat at Berne with "trying to reconcile Egyptian, Babylonish, and Judaic chronology."

Again he visited Berlin, and found the King most friendly, but his clear-sighted wife observes "how Bunsen's sanguine nature hoped for different results from time than were possible indeed from kings."

"Be not chilled by the coldness of those about you," he says, in a letter written at this time; "the perseverance of love and patience together" brings about great results.

A visit to Falk of Weimar, who had adopted a number of orphans deserted in the great war, interested him much. The widespread misery of that period struck him even so long after it was over as 1840.

At length he was sent on the mission to England, and the pleasure of their return there to remain permanently was great to both husband and wife. He immediately assumed a place among us which no other ambassador had ever here obtained, living habitually with the best minds [which] England at the time possessed. His sympathies were singularly catholic; there were so many sides to his mind, that he had points of contact with the greatest possible variety of men, while he saw the best side of all. Perhaps Arnold, Julius Hare, and Whately might be said to be those with whom, however, he most truly fraternized; indeed the four were sometimes accused of living too much "in a mutual admiration society."

It almost takes one's breath away only to read the list of occupations which had to be crowded into every day,—the letters, the politics, the receptions, the diplomatic work, the social engagements, the philanthropic interests in which he joined,—and amidst all this the constancy with which he always contrived to steal time for his literary pursuits,—the amount of his daily reading, and the intercourse with literary men, to which, as to his old love, he always returned with unflinching zest. To the end of his life he was ever essentially a learner, with a youthful interest in knowledge, a power of acquiring, undaunted and unslacked by the pressure of work which sometimes became too heavy for even his strength.

He enjoyed to the utmost that full tide of life—social, political, scientific, and literary—which can only be found to perfection in London or Paris, and which he missed acutely afterwards in "the slack water" of Heidelberg and Bonn. Occasionally, however, he speaks bitterly of "the conflicting currents, disturbances, and interruptions of his outward calling and the convictions of the inner man."

"I seek to preserve peace and unity and remove dissatisfaction here, and then I learn daily much in this country of life itself. Therein consists English greatness. In art and science we, the Germans, have the advantage, the true poetry and philosophy of England is in life, and not in the abstract consciousness of that life."

His interest turned ever towards theological subjects, "the period between Origen and Luther," when the hierarchical system was established. The "new birth" which he expects "is slow and difficult, the new Reformation which the world wants everywhere. We Germans alone can give the formula of the new consciousness of Christianity:" "a universal priesthood, instead of an exclusive order, is what we may hope for in the future; works of love instead of professions of faith, a belief in a God within us, *i.e.*, Christ, with such awe and humility as can alone preserve him to our souls."

As time went on he was painfully struck with "the religious state of England, the inward disease, fearful hollowness, spiritual death of the philosophical and theological forms of the nation;" the manner in which the "outward forms no longer expressed the inward emotion."

"The German nation has neglected and sacrificed all political, individual existence and common freedom, to pursue in faith the search after truth. In England the political life has eaten out the other."

"Plato says, that seven years of silent inquiry are needful for a man to know the truth, but fourteen in order to learn how to make it known to his fellow man,"—a proportion he does not find observed!

"The direction of the Church of England since 1843," seemed to him "to have been erroneous, the hierarchical tendency now prevailing cannot hold. I more and more feel it to be an axiom, that Christology, as taught by the Churches, cannot be brought into union with the right interpretation of Scripture, the historical views, speculative thought, and moral consciousness of the time we live in."

"Why should we be impeded by the falsely

so-called Apostles' Creed, or the pre-eminence given in it to the mythical deposit of the deep impression produced by the divine revelation in Christ, which has become predominant in the Churches? . . . Why should not faith in the divine revelation be true and vigorous, when it assumes that man is the highest exponent of that divine revelation which is given to us mortals?"

"To attribute infallibility to Ezra's synagogue and the Maccabean successors is worse than to ask it for the Pope, it is sheer Rabbinism or prejudice."

"In England everything except the moral principle in the form of the fear of God is deathlike. Thought itself is crudely rationalistic here, public worship in general lifeless, and the vivifying spirit startles like a spectre when it appears."

"The rising generation" appeared to him to be "partly infidel and partly bigoted."

These are a few of the scattered notices of his thoughts during the next twelve years that he spent amongst us. A curious sketch might be worked out from the "life" of the changes and phases of religious opinion which he witnessed.

He believed cordially in the mission of his own nation. "We are still," he says, "the chosen people of God, the Christian Hellenes, but the intellectual life in my native country wants interpretation."

The idealizing, sentimental German manner of looking at politics which characterized him, clung to him throughout his diplomatic career, and made the hard-headed common sense of such statesmen as Lord Palmerston sovereignly antipathetic, particularly on such questions as the establishment of a joint bishopric at Jerusalem by England and Prussia, and the woes of Schleswig-Holstein, so soon to be absorbed entire by her chivalrous protector.

But politics had never the absorbing interest for him which literature possessed, and he falls back gladly upon his Oriental and philological studies, carried out by Max Müller in a way which he heartily admired and almost envied—on Lepsius and Egypt, and Rawlinson's "unspeakably instructive Babylonian inscriptions"—in a tone of longing which is almost pathetic.

The account given by Madame de Bunsen of their visits to Windsor and Osborne, and of Bunsen's conversations with Prince Albert, show what congenial minds they found in each other.

At one time they were "discussing the relative position of the three nationalities of England, France, and Germany, to each other and the world. . . . France forms the medium between the practical English and the theoretic German. They have always understood how to coin the gold of intelligence and bring it into circulation, but their influence is diminishing. The Prince observed one day that the danger of the French nation was in licentiousness, the Englishman's besetting sin was selfishness, that of the German self-conceit; every German knows all and everything better than all other folk."

"My life is one of great and varied interest," Bunsen writes at this time. "I am to find the old Duke at Windsor, whom the Queen has often caused me to meet, and who is always peculiarly communicative to me." On the eve of the 10th of April, when thrones and constitutions were shaking all over Europe, and fears were expressed for the stability of England, he met the Duke again, at Lady Palmerston's. "'Your Grace will take us all in charge?' 'Yes, but not a soldier shall be seen unless in actual need; if the force of law is overpowered, then is their time; it is not fair on either side to call them in to do the work of police—the military must not be confounded with the police, nor merged in the police'—grand maxims of political wisdom."

His intercourse, indeed, with the Queen and Prince Albert was singularly interesting and free. The fact of his being a German and an ambassador seems to have enabled them to admit him to a kind of intellectual intimacy which they did not allow themselves elsewhere. Prince Albert, a man of original thought, and with the healthy desire to put that thought into action which a clever benevolent man must feel, was yet denied the smallest loophole for its exercise except vicariously. Bunsen talks of "the absurd jealousy of the English, who refused in his case to acknowledge their own favorite dogma that the wife is, and ought to be, under the influence of her husband." The Queen's touching account of the manner in which Albert accepted this most difficult and trying position, and how much he was able to accomplish under such trammels, is confirmed again and again in Bunsen's letters. And the testimony which he bears to the character of the Queen, and her

virtues, is one which any person in any class of life might well be proud of.

"A pleasant evening at Osborne" he describes once:—

"It is here that the Queen feels herself most at home; she here enjoys her domestic life and family happiness to her heart's content, walks in her beautiful gardens and grounds with the Prince and her children. The prospect of the sea and of the proud men-of-war of Great Britain in the midst of a quiet rural population is very striking."

Madame de Bunsen particularly mentions "the truth and reality of the Queen's expression, which so strongly distinguishes her countenance from the fixed mask only too common in the royal rank of society."

The Great Exhibition had just been started on one of these visits, and the Prince was full of hopes as to the good which it might be expected to bring in its train. "No one could conduct the undertaking but the Prince, from his great versatility of knowledge and his impartiality. I suggested a mixed jury."

Whether staying at Windsor or Osborne, he repeatedly alludes to the amount of hard work which the Queen has to perform and her conscientious mode of doing it.

"To-day," he says, "pacing up and down the corridor at Windsor, looking out on the towers and turrets, I was meditating on the happiness which dwells within these walls, founded on reason, integrity, and love. It is a pattern of the well-ordered, inwardly vigorous, and flourishing life which spreads all around, even to the extremities of this great island."

The whole account is a great testimony both to the Queen and her husband; and, remembering how near was the catastrophe of their separation, the description of the happiness of the Queen is most pathetic.

He is, of course, in communication with all the ministers and statesmen of the day, and little hints as to their idiosyncrasies crop up. "Met Palmerston to-day, sweet as honey;" and he gives instances of his kindly nature. "A letter from Gladstone of twenty-four pages; he is beset with scruples, his heart is with us, but his mind is entangled in a narrow system. He is by far the first intellectual power on that side." "We dined at the American Minister's, and heard

Macaulay talk almost the whole dinner through," &c., &c.

But most interesting of all are the notices, as beforesaid, of the phases of religious and political thought in England which he witnessed, the extraordinary changes in freedom of opinion which have taken place, the stir on all manner of social questions which has marked the last thirty or forty years; these all pass before us in Madame de Bunsen's book, just touched on, noted without passion, not fought over, but looked at with no party view either political or religious, in a way which would be quite impossible for a native Englishman however impartial—with a candor which requires the distance attained only by time or by a different nationality—a perspective which no soldier engaged in the *mêlée* could ever even hope to reach.

The abortive Hampden discussion, which risked so much for one who so little merited the trouble he caused;—the Gorham controversy, which threatened a sort of Free-Church secession of the Evangelical party, implying the extraordinary question whether it pleases God to damn little unbaptized babies eternally or not—"the judgment was one of the most remarkable pronounced since the Reformation and Civil Wars, on a point of faith; proving that the Liturgy was intended to soften and relax doctrine, not to make the Articles more strict;"—the great High Church movement of Newman, Pusey, and Keble; the reaction against the narrowness and ugliness, the want of Catholic sympathies and æsthetic taste alike of the Low Church party,—which yet had been doing such admirable service in its time against the dead, cold rationalism of the eighteenth century;—the almost forgotten struggles of Arnold for freedom of thought and action, which are now merged in his fame as the first of our time who took the large view of English education, for which one must otherwise go back to Dean Colet and Milton;—the storms in a tea-cup over the rejection of Mr. Maurice from his professorship at King's College, for doubting the eternity of damnation and hoping for the final salvation of the race;—the curious bit of diluted mediævalism, the heretical book luckily taking the place of the heretic himself, when Sewell gravely burned the

"Nemesis of Faith" in the quadrangle of Exeter,—a solemn farce almost incredible in these days:—all these in succession are alluded to with a singular equality of unruffled interest. He was amongst us, and yet not of us.

At length, and somewhat suddenly, in 1854, the time of repose for which he had so often sighed was at hand. The political interest opposed to his own triumphed at Berlin, and he was dismissed, although with very kind expressions of private regard from the King, yet somewhat painfully after such long service. Thenceforth his life was one of literary retirement.

"I have at last come to the point which I have been striving after since 1817,—the Life of Christ,—although I must begin by clearing the porch and entrance-hall of the Temple, obstructed by the theologians, still more than by the philosophers."

Many of his ten sons and daughters were now married, and he and the remainder of his family established themselves for a time in a *château* near Heidelberg, with a beautiful view of the Neckar and the hills, where they remained for several years, he writing and reading incessantly as usual, and seeing a number of friends on their way to and from the south. The situation proved, however, in winter to be both cold and solitary, and he missed the command of the best society, to which he had been accustomed all his life,—the more so as he grew older and weaker.

The family then retired to Bonn, and continued there (with a short flight to Cannes) until his death, aged sixty-nine, in 1860, when he sank away with that full faith in God's presence in, and action on the world, both here and hereafter, which had characterized his whole life. "It is sweet to die," he repeated; "with all weakness and imperfection I have ever lived, striven after, and willed the best and noblest only. But the best and highest is to have known Jesus Christ." His "Life of Jesus" had been one of the great interests of his declining years, carried on to the last in spite of much pain and feebleness. "A life in the first place of only two years out of thirty-two, and since that of 1800 more"—of One so truly indeed living to him for ever.

Turning to his wife he said, "We shall

meet again before God; if I have walked towards Him, it was by your help." He spoke of old friends and old times in Rome by her side, the agitation with which he had left the Capitol, and how they "had constructed a new Capitol in free England which they had enjoyed for twelve and a-half years." "How graciously had God conducted him!"

His mind was essentially pious, in the beautiful sense of the old word; God was to him a reality to whom he referred all his thoughts and actions, and to Him he passed tranquilly away as a son into the bosom of his Father.

Very few men have methodized their convictions or their ideas; the different parts of their minds have grown at different times and in different associations, and often do not harmonize. Bunsen's mind was like some great mediæval structure, some *hôtel de ville* or cathedral in an old Flemish town, where a bit of *renaissance* is built on to a severe round Roman tower, or the capital of a semi-Italian period is added to an "early English" window, but neither can be pulled to pieces without destroying the whole, and they must go down together to the end. Accordingly words of belief in mesmerism and its cognates strangely contrast with the destructive historic theories which he shared with Niebuhr, and his fearless investigations into Biblical history and chronology.

His powers of acquisition were altogether out of proportion to his power of digestion, and the inchoate volumes full of invaluable learning remind one of a builder's yard: the carved work, the lintels, the pieces of cornice, are all there, but who will put together the great building which they ought to subserve?

In the division of good things allotted to each nation in many myths, the advantages of form were certainly not given to the German. He does the raw thinking for the human race, which must be moulded by a more artistic type of mind, worked up into a shape readable by ordinary humanity; the synthetic power is wanting with most Germans, whose books are often *mémoires pour servir*, storehouses which the rest of the world pillage mercilessly without acknowledgment. A German is so utterly careless of the outside which his thought has taken, that other nations, sorely

needing the materials thus conscientiously collected, pick the brains of their books, instead of translating them, and pass on. There is little pleasure generally in the act of reading their prose works. Surely no people with a sense of the art of words would have adopted a mode of writing where sentences a page in length are ended by the verb.

In France the respect for the medium is overpowering. That a thing should be *bien dit*, is much more important than that it should be true or worth saying. That the male and the female rhymes should come in the right places seems more necessary in a great French poem than the stuff of which it is made; which must be almost fatal to any fire of inspiration.

It was said of an old Greek "that his thoughts were so clearly expressed through his words that the reader was unconscious of the words used,"—they were completely transparent. With a German the meaning seems to be entangled in the words: "you cannot see the wood for the trees." With a Frenchman the words themselves are the principal object.

Bunsen's enormous power of work misled him in his undertakings. He was always collecting, and when his mind was full, it overflowed promiscuously into what he called a book, without apparently any idea of the necessity of co-ordinating his materials into a whole. Whatever he happened to be occupied with cropped up anyhow, anywhere. One winter he found that he required a knowledge of Chinese to carry out some philological inquiry. He set to work and learned it. Immediately an elaborate review of "Chinese particles" drifted into the "Philosophy of History."

There is no perspective in his books, and the tenses of the tongues of the South Sea islanders take up seventy pages of a history where Descartes and Spinoza are despatched in two.

But in England it was the man, and not the books, which seemed important and interesting. Even his opinions, heterodox as they often seemed, were not much regarded. "Allowances" were made for him; he had the "misfortune" to be a foreigner, and therefore was to be "pitied" more than condemned for those "aberrations" which were discov-

ered in his writings by the few who could read them. Moreover, he was in a great position, and the English mind is truly sensible of the right of such to think as they please. A Dean of family may be allowed a degree of latitude which in "the inferior clergy" must be punished by lawsuits and deprivation. For "that in the captain's but a choleric word, which in the soldier is flat blasphemy;" and an ambassador with a grand house, who gave delightful parties where Princes of the blood and Royal Highnesses of all nations, big and little, were to be met with familiarly, and visited and received cordially by men and women, who, meeting the same opinions without the protection of a star, would have pronounced their possessor "not a Christian," and have declared with horror, "The book of Daniel a history, not a prophecy! Why, the man is an atheist." Bunsen was singularly tolerant, however, of the intolerant. His large-hearted charity took in all sides of opinion and shades of doctrine, and under its shadow all parties agreed to meet in peace. The extremes of High and Low Church, large-minded religious men, rationalists, fine ladies, men of science, dissenters, brilliant men of letters, dingy professors, politicians, artists, philanthropists, dowdy old working-women, might all be seen collected in the great drawing-rooms of Carlton House Terrace. It was like the valley of Jehoshaphat—there the small and great met together,—the oppressor and the oppressed, the man who had been deprived of his salary or his living for holding to what he believed to be the truth, and the conscientious bigot who had tried to ruin him for righteousness' sake; and each found that the other was not as bad as he expected.

The help of one such centre of communication to real liberality of intercourse was almost incalculable. There was something in the genial temper of the house, the simple, true-hearted belief in goodness, which went far to neutralize the acrimony which ignorance of each other often brings with it. London is splitting more and more into coteries;

the distances are such that, for instance, the Regent's Park has little more to do with South Kensington than with Richmond. It is the place where the best of the nation, of every kind, are congregated for five months in every year,—where more of real interest on every topic under the sun is to be heard than anywhere else under the sun, yet it is strange how separate the political, scientific, and artistic streams keep from one another; and the loss of a house where all might mingle and be at ease was indeed very great.

Bunsen's large volumes on "God in History," which it was the real object of his life to discover, may be but little read by the world, but the more difficult problem which he and his wife solved, of showing how to live in the world socially and politically, which they enjoyed so wisely and so well, and yet not to be *of* the world, should continue to be studied in their Memoirs.

The last place where the real account of Madame de Bunsen's share in the important social influence of the house can be discovered is in her own estimate of it; but on her depended the inner wheels within wheels, which rendered the harmonious working of the great machine practicable. To a sympathy for all forms of excellence, in whatsoever coats and gowns of thought they were clothed, which loving intercourse with her husband had rendered as wide as his own, she added a common sense greater than his, and a knowledge of life and character often invaluable to him.

She was his true helpmate in all the passages of his life, the true partner of every thought and every feeling he possessed.

In whatsoever things were true, whatsoever things were lovely, honest, and of good report, she was one with him, to a degree which has hardly ever been surpassed; and the intelligent and appreciative record she has left of their life, with such tender reverence for his memory and such complete forgetfulness of self, will prove the most fitting memorial of her also which could possibly have been devised.—*Contemporary Review*.

THE LAWS OF DREAMS.

THE phenomena of dreams may well seem at first sight to form a world of their own, having no discoverable links of connection with the other facts of human experience. First of all there is the mystery of sleep, which quietly shuts all the avenues of sense and so isolates the mind from contact with the world outside. To gaze at the motionless face of a sleeper temporarily rapt, so to speak, from the life of sight, sound, and movement, which, being common to all, binds us together in mutual recognition and social action, has always something awe-inspiring. How unlike that external inaction, that torpor of sense and muscle, to the familiar waking life with its quick responsiveness and its overflowing energy! And then if we look at dreams from the inside, so to speak, we seem to find but the obverse face of the mystery. How inexpressibly strange does the late night-dream seem to one on waking. He feels he has been sojourning in an unfamiliar world, with an order of sights and a sequence of events quite unlike those of waking experience, and he asks himself in his perplexity where that once-visited region really lies, or by what magic power it was suddenly created for his fleeting vision. In truth, the very name of dream suggests something remote and mysterious, and when we want to characterize some impression or scene which by its passing strangeness filled us with wonder, we naturally call it dream-like.

The earliest theories respecting dreams illustrate very clearly this perception of the remoteness of dream-life from waking experience. The view held in common by the ancient world, according to Artemidorus, was that dreams were dim previsions of coming events. This great authority on dream interpretation (*oneirocritics*) actually defines a dream as "a motion or fiction of the soul in a diverse form signifying either good or evil to come;" and even a logician like Porphyry ascribed dreams to the influence of a good demon, who thereby warns us of the evils which another and bad demon is preparing for us.* The same mode

of viewing dreams is quite common to-day, and many who pride themselves on a certain intellectual culture, and who imagine themselves to be free from the weakness of superstition, are apt to talk of dreams as of something uncanny, if not distinctly ominous. Nor is it surprising that phenomena which at first sight look so wild and unconditioned should still pass for miraculous interruptions of the natural order of events.

Yet in spite of this obvious and impressive element of the mysterious in dream-life, the scientific impulse to illuminate the less known by the better known has long since begun to play on this obscure subject. Even in the ancient world a writer might here and there be found, like Democritus or Aristotle, who was bold enough to put forward a natural and physical explanation of dreams. But it has been the work of modern science to provide something like an approximate solution of the problem. The careful study of mental life in its intimate union with bodily operations, and the comparison of dream-combinations with other products of the imagination, normal as well as morbid, have gradually helped to dissolve a good part of the mystery which once hung like an opaque mist about the subject. In this way our dream operations have been found to have a much closer connection with our waking experiences than could be supposed on a superficial view. The quaint chaotic play of images in dreams has been shown to illustrate mental processes and laws which are distinctly observable in waking thought, more especially the apparent objective reality of these visions has been accounted for, without the need of any supernatural cause, in the light of a vast assemblage of facts gathered from the by-ways, so to speak, of waking mental life.

We do not mean to say that dreams are even now fully explained. Were this so, the motive of the present essay would be wanting. Both the physiology and psychology of the subject are far from complete. This is seen in a striking manner in the present insolubility of

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the question—so frequently discussed since the time of Locke:—Whether dreams are co-extensive with sleep, or whether they are confined to the intermediate stages of imperfect slumber. While many physiologists incline to the latter view, some few—among whom we may name Sir Henry Holland—go with Leibnitz and the Cartesians in upholding the former supposition. The incompleteness of the physiological interpretation is seen, too, in the divided state of opinion respecting the precise physical conditions of sleep. The most that can be called commonly accepted truth is that sleep is produced by a temporary congestion of the blood-vessels of the brain. But the precise steps by which this result is brought about are still unknown. With respect to the physiological conditions of dreams, there seems to be still less certainty. It is assumed of course that every dream answers to some partial and locally circumscribed excitation of the brain substance, but what may be the precise mode of this "automatic" activity is altogether a matter of conjecture. All that can be obtained is some more or less ingenious hypotheses, as for example the one recently put forward by Wundt, that the cerebral excitations are caused by the retardation of the circulation within the blood-vessels of the brain and the presence in the blood thus arrested of numerous products of decomposition.

Such being the uncertainty of the physiological theory of dreams, it seems better for one who is not a physiologist to approach the subject from the other and psychological side. And this line of inquiry is all the more inviting inasmuch as psychologists are by no means agreed respecting the precise mental structure of dreams. It is seen by all that the play of mental function in dreams differs considerably from the exercises of the waking mind; but there is great difference of opinion as to the precise nature and amount of this difference. For example it is maintained by some that reason and will are wholly excluded from dreams.

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For our present purpose a dream may, perhaps, be defined as a group or series of groups of vivid imaginative representations of sensory, motor and emotional experiences, which simulates the form of real perceptions, and which, while appearing as a connected whole, presents its various elements in combinations very dissimilar to those of waking experience. There seem to be three main problems involved in this statement of the phenomenon. First of all, it may be asked, whence the mind of the sleeper draws the various elements of its dreams. Secondly, one may inquire into the causes of the exceptional order of sequence and the strange forms of composition, in which the images of the sleeper are wont to present themselves. Lastly, the question may be raised, why these products of imagination should be taken by the dreamer for objective realities.

Since the last problem is the one which is best understood, and has been most adequately explained, it may be well to dismiss it at once by a few remarks, after which we shall be free to concentrate our attention on the other and more intricate questions.

Modern psychology has taught us to regard the difference between a sensation and an idea, a perception and an imagination, as one of degree and not of kind. Our mental image of the setting sun, for example, is said to be simply a faint copy of the impressions produced by the real object in visual perception. Hence, though there is in the normal mind a clear and broad distinction between the two classes of mental phenomena, there is a considerable margin within which the two tend to become confused and scarcely distinguishable. One part of this region of incomplete separation lies in normal perception itself, for this operation always involves an element of representation or idea, though it seems to be altogether real and immediate. Thus when I appear to myself to

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see the downy softness of a rose's petal, I am in truth only vividly imagining it by help of previous sensations of touch.

The great field, however, for this confusion of idea and sensation is to be found in all excited states of the imagination, including pathological conditions. Under these circumstances, pure fancies of the mind, by acquiring a certain degree of vividness and persistence, become mistaken for real perceptions. Many excitable persons cannot read a ghost-story at a late hour of the evening without danger of a momentary illusion that they see or hear something uncanny and supernatural. In mental disorders the mistaking of some imagination for a real fact is one of the commonest symptoms. Whether the evil be a passing state of nervous irritability due to fatigue and exhaustion, or a permanent condition of mania, there is the same tendency to mistake a mental fiction for a fact, an imaginative representation for an immediate presentation. It is this last kind of effect which has the closest connection with dreams, and it will be well to try to elucidate it yet a little further.

In the normal mind our most vivid imaginations are prevented from imposing on us by what M. Taine calls the "corrective" of a present sensation.* When, for example, the weary prisoner indulges in a pleasing fancy picture of his home and family, the perception of the narrow boundaries of his cell at once corrects the tendency to illusion. So long as real sensations are present to the mind, and there is any distinguishable difference between the sensations and the images, so long is it difficult to lapse into this state of illusion. This result may occur either when the imagination has reached such an intensity as to be no longer distinguishable from the sensation of the moment, as in the illusions and hallucinations of the insane, or when, on the other hand, actual sensations are removed, so that the various fancies which run to the mind lack their

proper corrective. In other words, ideas are recognised as such through a certain ratio of intensity to actual sensations; they fail to be recognised when this ratio is obliterated either by the elevation of the idea in intensity, or by the obscurity of the sensation.

It seems probable that the apparent reality of dream-fancy is a result of both these circumstances. One thing is certain, that when sleeping we are deprived to a large extent of external sensations, so that the mind loses its normal standard of comparison. On the other hand, it is exceedingly likely, if not certain, that the imaginations of our dreaming states have an absolute as well as a relative increase of intensity. It seems to be a plausible supposition that the cerebral elements excited in dream activity have an extraordinary degree of irritability, [so that the stimulation of them, however it be effected, has as its consequence a peculiar intensity of the corresponding ideas. These considerations appear fully to account for the seeming reality of our dreaming fancies.

We may now pass to the more intricate question respecting the sources and originating impulses of our dream-fancies.

David Hartley says the elements of dreams are derived from the three following sources: (a) impressions and ideas lately received; (b) states of the body, especially of the stomach during sleep; and (c) ideas restored by association. This serves very well as a rough classification of the exciting causes of dream images, though recent psychology assisted by physiological experiment may enable one to supply a more elaborate scheme.

The exciting causes of dream imagery may be broadly divided into two large classes, peripheral and central stimulations. By the former are meant those excitations which have their seat in the outlying parts of the nervous system, namely, the organs of sense, the muscular apparatus, and the vital organs, together with the external portions of the nerves connected with these. Central stimulations are such as do not depend in any way on these peripheral actions, but arise within the encephalic region itself. They are of two kinds, direct and indirect stimulations. The former de-

* M. Taine supposes that every image tends to pass into the semblance of an external perception, though in normal waking states this tendency is opposed and overcome by the stronger contradictory tendency of the sensation of the moment.—*On Intelligence*, Part I. p. 52.

pend entirely on the condition of the nerve elements (cells and connecting fibres) acted upon, and on the unknown influences (say those of the contents of the blood-vessels) exerted on them at the moment. The indirect stimulations arise as an extension of some previous excitation in the same or in some connected cerebral region. The former underlie many of the apparently spontaneous revivals of images of dreaming, and those fancies which depend on a recent impression or idea. The latter are the substratum of all ideas which rise in dream-consciousness through some link of association with a previous mental element, whether idea or sensation. Let us now review each of these classes in greater detail, and illustrate them by examples.

First of all, then, we have to examine how the several kinds of peripheral excitation brought about in the state of sleep serve as the prompters of dream image. And here the question which first suggests itself is whether actual sensations produced by external stimuli on the organs of sense play any part in this production. It is commonly supposed that the channels of our senses are wholly stopped during sleep, but this idea is incorrect. All of us probably can recall dreams in which a noise, a light, or an odor was an exciting cause. The bark of a dog, or the ticking of one's watch, frequently prompts the precise direction of dream fancy. Dr. Beattie speaks of a man who could be made to dream about any subject by gently talking of it in his ear when sleeping. For our knowledge of the extent to which sensation may feed, so to speak, dream-fancy, we are greatly indebted to the researches of M. Alf. Maury, described in his elaborate and highly interesting volume entitled *Le Sommeil et les Rêves*. M. Maury made experiments on this subject by engaging a coadjutor to employ appropriate sensory stimuli on his organs of hearing and touch while he was asleep, immediately after which he was to be roused, so as to record the dream of the time. The results were very curious. When his lips were tickled, he dreamt that a pitch-plaster was being torn from his face and lips; when a pair of tweezers was made to vibrate near his ear, he dreamt of

bells, the tocsin, and of the events of June, 1848. The connection between the dream-fancy and the external sensation in these cases is sufficiently plain. It is probable that the sensations of touch and pressure due to the contact of the various bodily parts with their surroundings, and with one another, during sleep, are potent influences in the origination of dreams.

Along with objective sensations due to the action of external stimuli on the sensory organs, we must reckon subjective sensations which arise from internal stimulation within the organ itself. It is known that when all external light is withdrawn from the eye, the optic nerve remains in a state of partial excitation. Hence the phantasies which often float before the eye in the dark, and which Goethe and Johannes Müller were able to observe at will with great distinctness. These subjective images commonly arise, according to Helmholtz, from varying pressure on the nerve exerted by the blood in the retinal vessels, or from a chemical action of the blood owing to its altered composition. Similarly it has been maintained that the extremities of the nerves of hearing, smell, and taste, may be acted on in the absence of properly external causes. Thus the flow of blood in the vessels of the ear is heard as a dull roar, and the changing condition of the saliva on the surface of the tongue and palate may give rise to distinct sensations of taste. Once more, variations in the state of the circulation and functional activity of the skin are accompanied with a number of sensations as of objects touching, tickling, or creeping over its surface. All these subjective sensations probably furnish a considerable part of the raw material of dreams. Though little remarked during waking hours, when the mind is controlled by the more powerful excitations occasioned by external objects and their movements, these vague feelings may be impressive elements in the circumscribed consciousness of the sleeper. More particularly the predominance of visual imagery in dream-fancy, which is expressed in one of the commonest names for a dream, namely, "vision," points to the conclusion that the subjective stimulations of the optic nerve—which may be intensified during sleep by the condition

of the retinal blood-vessels—play a prominent part in dream production. This conjecture is confirmed, as Wundt has recently pointed out, by the fact that we so often see in our dreams a multitude of like or exactly similar objects, for such a crowd of images exactly answers to the diffused 'light-chaos' which often reveals itself to the waking eye with the most complete external darkness.

Next to the influence of actions on the extremities of the nerves of sense, there comes that of excitations of the nerves which are connected with the voluntary muscles, and which regulate our various movements. We need not enter into the difficult question how far the "muscular sense" is connected with the activity of the motor nerves, and how far with sensory fibres attached to the muscular or the adjacent tissues. Suffice it to say, that an actual movement, a resistance to an attempted movement, or a mere disposition to movement, whether consequent on a surplus of motor energy or on a sensation of discomfort or fatigue in the part to be moved, somehow or other makes itself known to our minds even when we are deprived of the assistance of vision. And these feelings of active energy and of movement are common initial impulses in our dream experiences. It is quite a mistake to suppose that dreams are built up out of the purely passive sensations of sight and hearing. A close observation will show that in nearly every dream we imagine ourselves either moving among the objects we perceive or striving to move when some weighty obstacle obstructs us. All of us are familiar with the common forms of night-mare in which we strive hopelessly to flee from some menacing evil, and this fancy, it may be presumed, frequently comes from a feeling of strain in the muscles, due to an awkward disposition of the limbs during sleep. The common dream illusion of falling down a vast abyss is referred by Wundt to an involuntary extension of the foot of the sleeper, and the scarcely less common imagination of flight to the rhythmic play of the semi-voluntary movements of respiration.

Besides the sensations received through the proper organs of sense and the feelings connected with the muscles, our

dream-consciousness is liable to be stimulated by numerous other feelings called "systemic" or "organic" sensations, which are attached to the activities of the various bodily organs. Examples of this effect will readily recur to the reader who has been accustomed to reflect but very slightly on his dreams. Not to speak of the famous dream which Hood traces to an excessive indulgence at supper the preceding evening, one may recall the many dreams excited by feelings of oppression in the heart and lungs, by sensations of pain and giddiness in the head, by toothache and so on. A German writer, Herr Volkelt, in an interesting volume on *Dream-Fancy*, says it is not uncommon for a faint sensation of toothache to prompt images having a certain resemblance to the two rows of teeth, and quotes such a dream from Scherner, in which there appeared two rows of fair boys standing opposite one another, then attacking one another, resuming their original position, and so on. The present writer has frequently had grotesque fancies, such as that all his teeth became suddenly loose and fell out, which he has afterwards been able to connect with sensations of the teeth and gums. Sensations of temperature are very apt to give a direction to dream-fancy. A feeling of excessive warmth suggests images of stoves, furnaces, burning houses, and so on. Many dreams are distinctly traceable to varying conditions of the several secreting organs, and of the conducting apparatus of the excretions. Into these we need not enter. Enough has probably been said to show how large a quantity of material our dream-fancy derives from this lower region of bodily sensation.

We may now pass to the second great fountain of dream-life, the cerebral excitations, which are central or automatic, not depending on movements transmitted from the periphery of the nervous system. Of these stimulations the first class is direct, and must be supposed to be due to some unknown influence exerted by the state of nutrition of the cerebral elements, or the action of the contents of the blood-vessels on these elements. That such action does prompt a large number of dream-images may be regarded as fairly certain. First of all, it seems impossible to account for all the

images of dreaming fancy as secondary phenomena connected by many and various links of association with the foregoing classes of sensation. However fine and invisible many of the threads which hold together our ideas may be, they will hardly explain, one suspects, the profusion and picturesque variety of dream imagery. Secondly, we are able in certain cases to infer with a fair amount of certainty that our dream image is due to such central stimulation. The common occurrence that we dream of the persons and events, of the anxieties and enjoyments of the preceding day, appears to show that when the cerebral elements are predisposed to a certain kind of activity, as they are after having been engaged for some time in this particular work, they are liable to be excited by some stimulating influence brought to bear on them during sleep. And if this is so, it is not improbable that many of the apparently forgotten images of persons and places which return with such vividness in dreams are excited by a mode of stimulation which is for the greater part confined to sleep. I say 'for the greater part,' because even in our indolent, listless moments of waking existence such seemingly forgotten ideas sometimes return as though by a spontaneous movement of their own and by no discoverable play of association.

The second division of these central stimulations, which I have called the indirect, includes no doubt a very large number of our dream-images. There must, of course, be always some primary cerebral excitation, whether that of a present peripheral stimulation, or that which has been termed central and spontaneous; but when once this first link of the imaginative chain is supplied, other links may be added in large numbers through the operation of the forces of association. One may indeed safely say that the large proportion of the contents of every dream arrive in this way. The simplest type of dream excited by a present sensation contains these elements. Thus when the present writer dreamt, as a consequence of a loud barking in the night, that a dog approached him when lying down, and began to lick his face, the play of the associative forces was apparent. A mere sensation of sound called up the appropriate visual

image, this again the representation of a characteristic action, and so on. So it is with the dreams whose first impulse is some central or spontaneous excitation. A momentary sight of a face, or even the mention of a name, during the preceding day, may give the start to dream activity; but all subsequent members of the series owe their revival to a tension, so to speak, in the fine threads which bind together, in so complicated a way, our impressions and ideas.

The subject of mental association naturally conducts us to the next problem in the interpretation of dream-life, the laws which govern the ordering and shaping of the various elements of our dream-pictures. It is commonly said that dreams are a grotesque dissolution of all order, a very chaos and whirl of images without any discoverable connection. On the other hand, a few claim for the mind in sleep a power of arranging and grouping its incongruous elements in definite, even though very unlife-like, sensuous representations. Each of these views is correct within certain limits; that is to say, there are dreams in which the strangest disorder seems to prevail, and others in which one detects the action of a central control. Yet, speaking generally, sequences of dream-thought are determined by certain circumstances and laws, and so far are not haphazard and wholly chaotic. We have now to inquire into the laws of these successions; and, first of all, may ask how far the known laws of association, together with the peculiar conditions of the sleeping state, are able to account for the various modes of dream-combination. We have already regarded mental association as adding a new and large store of dream-imagery; we have now to consider it as giving a certain direction or order of succession to our dream elements.

First of all, then, in the case of all the less elaborately ordered dreams, in which sights and sounds appear to succeed one another in the wildest dance, the mind may be regarded as purely passive, and the mode of sequence be referred to the action of association complicated by the ever-recurring introduction of new initial impulses, both peripheral and central. These are the dreams in which we are conscious of being perfectly passive,

either as spectators of a strange pageant, or as borne away by some apparently extraneous force through a series of the most diverse experiences. The flux of images in these dreams is very much the same as that in certain waking conditions, in which we relax attention, both external and internal, and yield ourselves to the spontaneous play of memory and fancy.

If the reader thinks it impossible that all the most incoherent successions of dreams are due to certain mental laws, he should carefully study the nature and range of the principles of association. According to these, any idea may, under certain circumstances, call up another, if the corresponding impressions have only once occurred together, or if the ideas have any degree of resemblance, or, finally, if only they stand in marked contrast with one another. Any accidental coincidence of events, such as meeting a person at a particular foreign resort, and any insignificant resemblance between objects, sounds, &c., may thus supply a path, so to speak, from fact to dream-fancy. In our waking states these innumerable outlets are practically closed by the supreme energy of the coherent groups of impressions furnished us from the world without through our organs of sense, and also by the volitional control of internal thought in obedience to the pressure of practical needs and desires. In dream-life both of these influences are withdrawn, so that delicate threads of association, which have no chance, so to speak, in our waking states, now exert their fine potency. Little wonder then that the ties which hold together these dream-pictures should escape detection, since even in our waking thought we so often fail to see the connection which makes us pass in recollection from a name to a visible scene, or perhaps to an emotional vibration.

It is worth considering for a moment how great an apparent disorder must break in on our thought when the binding force of resemblance has unchecked play. In waking thought we have to connect things according to their essential resemblance, classifying objects and events for purposes of knowledge or action, according to their widest or their most important points of similarity. In sleep, on the contrary, the slightest touch

of resemblance may engage the mind and affect the direction of its fancy. In a sense we may be said, when dreaming, to *discover* mental affinities between impressions and feelings. Among these links of affinity we must not overlook those which hold together analogous states of feeling, as bodily uneasiness and emotional distress. Many of the successions of ideas set in movement by bodily sensations during sleep are explained by this thread of connection.

The force of even the lesser degrees of similarity among impressions is well illustrated in many of those odd transformations of image which occur in dreams. A person often seems to our dream-fancy, by a kind of metempsychosis, to assume the shape of another, and the dreamer not unfrequently blends in this way his own bodily appearance with that of another. So scenes, such as brilliantly-lit halls, gay assemblages, impressive landscapes, melt away into others without any sensible break. Such "transformation scenes" answer probably to the transition of a mental image to another, when both have some element in common.

We do not pretend, be it understood, to explain why, in every case, the action of association should take this or that particular direction rather than some other. There are myriads of associative ramifications to some of our most familiar images, such as those of our relatives, homes, &c., and it is hopeless to attempt to say why one direction should be taken rather than another, and especially why a slender thread should pull, when a stronger cord fails to do so. To take an example, names, when heard in our waking moments, call up at once mental pictures of the corresponding objects, and our thought is carried away in this direction. In sleep, however, a familiar name may call up a similar name, and so produce the oddest sequence of ideas. Thus M. Maury tells us that he has passed from one set of images to another through some similarity of names, as that between *corps* and *cor*.

In the absence of certain knowledge, we may have recourse to hypothesis, and attribute these seemingly random selections among many links of association to different degrees of irritability in the corresponding cerebral elements, and to

various grades of stimulation exerted at the moment by the contents of the blood-vessels. We may easily suppose that, at any given moment, among many elements alike connected with some actually excited one, some are, from their state of nutrition or from their surrounding influences, more powerfully predisposed to excitation than others; and hence, it may be, the apparent arbitrariness of the associative forces in dreams.

One word, in completing this slight analysis of our more passive dreams, as to the influence of the peripheral and central stimulations on the course of dream-fancy. We may suppose that these initial impulsions are continually recurring during a dream, and so we may understand much of the incoherence of dream successions. For example, I may be dreaming of a ball-room, with its dazzling brilliance and its interwoven movements. If at the same moment, consciousness is affected through a peripheral excitation by a sensation of a disagreeable sound, say the clatter of the window or the moaning of the wind, this may give rise to the oddest intermixture of images. I might, for example, dream on that somebody was beginning to shatter the furniture of the ball-room, or that it was suddenly invaded by a throng of wailing women, and so on.

Yet if the processes of association, together with the recurring interruption of these by peripheral or central excitations, account for one class of dream, they do not so easily explain the order of events in many of our more finished, one might almost say, more artistic dreams. Here the several parts of the dream appear somehow or other to fall together into a whole scene or series of events, which, though it may be very incongruous and absurdly impossible from a waking point of view, nevertheless makes a single object for the dreamer's internal vision. This plastic force, which selects and binds together our unconnected dream-images, has frequently been referred to as a mysterious spiritual faculty, under the name of "creative fancy." Thus Cudworth says, in his *Treatise concerning Eternal and Immutable Morality*, "that dreams are many times begotten by the phantastical power of the soul itself . . . is evident from the orderly connection and coherence of imaginations

which many times are continued in a long chain or series." One may find a good deal of mystical writing on the nature and activity of this faculty, especially in German literature. Let us see whether these higher operations in dream-construction can be analysed into impler mental actions.

In the first place, then, it is possible to give to association a more extended signification, so as to include operations which are frequently referred to the active reason. When, for example, the several impressions simultaneously made on my retina arrange themselves as elements of an external order, having certain space relations of situation, distance, &c., the effect may be said to follow from the action of association. An impression received through any particular nerve fibre represents, through numerous previous experiences, certain definite relations in space. Hence the perfect space order which reigns in many of our dreams, and which serves to give such a degree of objective reality to our fancies, must be referred to association as much as any accidental sequence of ideas. The only difference in this case is that the connection is so close and the revival of the associated factor so instantaneous. Owing to the predominance of visual images in dreams (which is doubtless connected with the special activity of the organ of vision in waking life, and with its high degree of susceptibility to subjective stimulation), these inferences respecting locality play an important part in dreams. It has often been asked, why, when dreaming, we tend to project our own feelings and bodily conditions into other objects. The answer to this is probably to be found in the presence of visual sensations and images together with their objective and local interpretations.

But again, association may present itself, not simply as a definite tendency in an impression or idea to restore some second idea, but also as an indefinite tendency to restore some one among a group of ideas. For example, if, when walking in a dark night, a few points in my retina are suddenly impressed by rays of light, I am prepared, I may even expect to see something above and below, to the right and to the left of this object, that is to say, to have my retina impressed in the adjacent part. Why is

this? In part, perhaps, because there is some innate understanding, so to speak, among all contiguous nerve-fibres, which shows itself now and again in the curious phenomena of irradiation and associated sensations. In part, too, because in all my individual experience, the stimulation of any retinal point has been connected with the stimulation of adjoining points, either simultaneously, by some other object, or successively by the same object as the eye moves over it. Hence we can understand that when any optic fibres are excited during sleep, and images having corresponding *loci* in space float before the imagination, there is a predisposition to see other objects which arrange themselves in adjacent parts of the visible space. The particular visual image which happens to recur is, of course, determined by the special conditions of the moment, by bodily sensations or spontaneous central excitations, or lastly, by definite associations with preceding images. What this disposition to associative action among adjoining nerve fibres of the same organ effects, is to give a certain local habitation to the image which happens to be thus revived.

Just as there are such dispositions to united action among various parts of one organ of sense, so there may be among different organs, which are either connected originally in the infant organism, or have communications opened up by frequent co-excitation of the two. Such links there certainly are between the organs of taste and smell, and between the ear and the muscular system. A new odor often sets us asking how the object would taste, and a series of sounds commonly disposes us to movement of some kind or another. How far there may be finer threads of connection between other organs, such as the eye and the ear, which do not betray themselves amid the stronger forces of waking mental life, one cannot say. Whatever their number, it is plain that they will exert their influence, within the comparatively narrow limits of dream-life, by giving a general bent to the order of those images which happen to be called up by special circumstances. Thus if I were dreaming that I heard some inspiring music, and at the same time an image of some friend was anyhow excited,

my dream-fancy might not improbably make this person perform some strange sequence of movements.

A narrower field for these general associative dispositions may be found in the tendency, on the reception of an impression of a given character, to look for a certain kind of second impression: though the exact nature of this is unknown. Thus, for example, the form and color of a new flower suggest a scent, and the perception of a human form vaguely calls up an idea of vocal utterances. These general tendencies of association appear to me to be most potent influences in our dream-life. The many strange human forms which float before our dream-fancy are apt to talk, move, and behave like familiar men and women, however little they resemble their actual prototypes, and however little individual consistency of character is preserved by each of them. Special conditions determine what they shall say or do; the general associative disposition accounts for their saying or doing something.

We thus seem to find in the purely passive processes of association some ground for that degree of natural coherence and rational order which our more mature dreams commonly possess. These processes explain, too, that odd mixture of rationality with improbability, of natural order and incongruity, which characterizes our dream-combinations.

Nevertheless, I quite agree with Herr Volkelt that association, even in the most extended meaning, cannot explain all in the shaping of our dream-pictures. The "phantastical power" which Cudworth talks about clearly includes something besides. It is a gratuitous supposition that, when dreaming, there is no activity of will, and consequently no direction of the intellectual processes. This supposition, which has been maintained by numerous writers, from Dugald Stewart downwards, seems to be based on the fact that we frequently find ourselves in dreams striving in vain to move the whole body or a limb. But this only shows, as M. Maury remarks in the work already referred to, that our volitions are frustrated through the inertia of our bodily organs, not that these volitions do not take place. In point of fact, the

dreamer, not to speak of the somnambulist, is often conscious of voluntarily going through a series of actions. This exercise of volition is shown unmistakably in the well-known recorded instances of extraordinary intellectual achievements in dreams, as Condillac's composition of a part of his *Cours d'Etudes*. No one would maintain that such a process was possible in the absence of intellectual action carefully directed by the will. And something of this same control shows itself in all our more fully developed dreams.

The active side of the mind manifests itself unmistakably in our dream-life in the form of *attention*. Although sleep involves the withdrawal of attention from the external channels of knowledge, it does not hinder its being concentrated on the internal processes of imaginative representation. In truth all who can recall their dreams know that they are frequently aware of having exercised their attention on the images presented to them in sleep. I frequently have a feeling on waking that I have been striving to see a beautiful object which threatened to escape my perceptions, or to catch faint and receding sounds of preternatural sweetness, and in some cases dreamers retain a recollection of the feeling of strain connected with the exercise of attention during dreaming.

Now this exercise of attention may either be a purely reflex action or may approximate to a properly voluntary operation. It is reflex when excited by the mere impressiveness of the image which happens to reveal itself to consciousness. In this case its effect is to fix and hold the image, and so to give it greater intensity, distinctness, and persistence. In other instances, this exercise of attention may bear a closer resemblance to the voluntary processes, properly so called. This is the case when it serves to select one from among a crowd of competing images, on account of some relation of fitness to preceding stages of the dream. This selection is carried on rapidly and with the minimum of consciousness in the case of every creative poet, and its presence in dream construction helps to account for that measure of coherence which certainly marks our most striking dreams.

There are two principal motives to

this selective action of attention. The first is the impulse to seek unity and consistency among the heterogeneous elements of dream-consciousness; the second the instinct for an emotional harmony. A word or two will be sufficient to explain the operation of each of these forces.

Whenever we are attentively watching a scene or incident in waking life, we are continually looking on and anticipating the order of events; and this concentration of attention under the stimulating force of a more or less definite expectation has an appreciable effect on the subsequent perceptions. If, for example, a lover is eagerly expecting his mistress at some sylvan trysting-place, he will be very apt to see a lady's robe or face in any object which happens to have but the faintest resemblance to these things, such as a patch of tree striped of its bark.* When our reasoning faculties are fully active, these momentary illusions are at once corrected by a new and more exact observation of the reality. But when sleeping the case is different. The image that happens to present itself to consciousness is not, like an external impression, something fixed and unchangeable so far as we are concerned. It is itself the product of internal imagination, and is therefore highly modifiable by any mental force brought to bear on it. This fact throws light on the influence of attention and expectation. The dreamer's mind is absorbed, we will suppose, in watching some shifting scene, as a 'procession or a battle. New images crowd in from the two sources of peripheral and central stimulation. The pre-existing group of images gives a certain bent to attention, disposing the mind to see in every new dream-object a connected element, an integral factor of the vision. Thus the degree of coherence which we commonly observe in our dreams, may be referred to the reciprocal modification of images by their respective associative forces, both definite and special and indefinite

* When the sensation is less sharply defined, the play of ideas and of attention may serve to modify it to an almost unlimited extent. Thus Goethe tells us that he was able to impose a type on his subjective visual sensations or phantasms, transforming them into flowers, etc., according to his fancy.

and general, under the controlling influence of attention, which again is stimulated by a semi-conscious impulse to secure unity. In this way whole scenes and chains of events are built up. When these aggregates reach a certain fulness and distinctness, they become dominant influences; so that any fresh intruding image is at once transformed and attached more or less closely to the previous group.

This process is clearly illustrated in a curious dream recorded by Professor Wundt. Before the house is a funeral procession: it is the burial of a friend, who has in reality been dead for some time past. The wife of the deceased bids him and a friend go to the other side of the street and join the procession. After she had gone away, his acquaintance remarks to him: "She only said that because the cholera rages over yonder, and she wants to keep this side of the street for herself." Then comes an attempt to flee from the region of the cholera. Returning to his house, he finds the procession gone, but the street strewn with rich nosegays, and there are crowds of men who seem to be funeral attendants, and who, like himself, are hastening to join the procession. These are, oddly enough, dressed in red. When hurrying on, it occurs to him that he has forgotten to take a wreath for the coffin. Then he wakes up with beating of the heart.

The sources of this dream are, according to Wundt, as follows:—First of all, he had, on the previous day, met the funeral procession of an acquaintance. Again, he had read of cholera breaking out in a certain town. Once more, he had spoken about the particular lady with this friend, who had narrated facts which proved the selfishness of the former. The hastening to flee from the infected neighborhood and to overtake the procession was prompted by the sensation of heart-beating. Finally, the crowd of red bier-followers, and the profusion of nosegays, owed their origin to subjective visual sensations—the "light-chaos" which often appears in the dark.

Let us now see for a moment how these various elements became fused into a connected chain of events. First of all, we may suppose the image of the procession occupies the dreamer's mind.

From quite another source the image of the lady enters consciousness, bringing with it that of her deceased husband and of the friend who has recently been talking about her. These new elements adapt themselves to the scene, through the play of the reciprocal modifications already spoken of. Thus the idea of the lady's husband recalls the fact of his death, and the pre-existing scene easily suggests the idea that he is now the person buried. The next step is very interesting. The image of the lady is associated with the idea of selfish motives; this would tend to suggest a variety of actions, but the one which becomes a factor of the dream is that which is adapted to the other existing images, namely the procession on the further side of the street, and a vague representation of cholera (which last, like the image of the funeral, is due to an independent central excitation). That is to say, the request of the lady, and its interpretation, are a *resultant* of a number of reciprocal actions, under the sway of a lively internal attention. Once more, the feeling of oppression of the heart, and the subjective stimulation of the optic nerve might suggest numberless images besides those of anxious flight and of red-clad men and nosegays; they suggest these, and not others, in this case, through the force of the pre-existing mental images, which, acting through attention, select from among many tendencies of reproduction those which are congruous with themselves.

It may be added that this process of adaptation and fusion is sometimes pursued with a fuller degree of conscious purpose. I am often able upon waking to recall a feeling of being confused by a crowd of incongruous images, and of striving to see their proper relations. And this endeavor probably includes the selection and powerful modification of the images according to the mutual attractions which they derive from the order of our past waking experiences.

Let us now glance at the second force, which contributes so greatly to the unity and coherence of our dream pictures, the impulse to emotional harmony. If any emotion, whether of a pleasurable or a painful character, gets a certain footing in consciousness, it begins to play the tyrant in relation to our ideas and

even our perceptions, by predisposing attention towards those mental images which harmonise with the state of feeling. This is not, strictly speaking, a case of the voluntary exercise of attention, since we often feel the result to be painful, and strive to turn our thoughts to other objects. Yet it is carried on in much the same way as though there were a deliberate resolve to select images of a certain emotional character. It is a common observation that a man carried away by fear can only represent to himself as probable or actual that which is terrible and which consequently nourishes the dominant emotion. The same is true in a less striking degree of the pleasurable emotions, as love. In the most ardent moments of affection, we are incapacitated for seeing what is not beautiful and lovable in the object of the affection. In this way a dominant feeling gives an emotional unity to the images of the brain; and this is the unity which holds together the many otherwise disconnected ideas of a lyric poem. Now, a state of feeling is so frequently at the foundation of our dreams that one might plausibly argue that there are no dreams which are not profoundly colored in this way. For my own part, at least, I find in all my recollected dreams the unmistakable traces of such a controlling influence. In the dream of Professor Wundt, already narrated, one may detect a certain thread of emotional unity. The influence of anxiety and fear, traceable probably to the sensations of the heart, binds together the images of the funeral, the cholera, the crafty design of the lady, the flight, and the omission to bring a wreath. In this way a further selective and adaptative force is brought into play, which crosses and complicates the action of the others.

It is to be remarked that this emotional thread of unity does not necessarily consist of only one definite variety of feeling, such as love or terror. Feelings have certain affinities among themselves, apart from the common characters of the pleasurable and painful, by reason of which they easily pass the one into the other. Thus, the so-called bodily "feelings" have their analogous counterparts in "mental emotions." A state of bodily irritation is, as Mr. Darwin has remarked, very like the feeling of mental

perplexity. The pleasurable elation which arises from the relief of bodily pressure, or the obstruction of an organic process, is closely akin to an emotion of liberty, or the joyous sense of success after difficulty and doubtful endeavor. Hence, if a certain state of feeling is anyhow excited, it may become the central point for a whole circle of variegated images. And this is what very frequently happens in dreams. An emotion of grief, caused by the recent death of a friend, may call up images of other distressing events, such as failure in some ambitious project, loss of property, and so on. The most common source of these emotional states during sleep is the region of bodily sensations, more particularly those of the painful class. Through their analogies with mental emotions these organic sensations excite or attract groups of widely-unlike images, agreeing only in their fitness to sustain one common tone of feeling. Every reflective dreamer will be able to trace these connecting threads in dreams which would otherwise seem to lack all coherence.

There is only one other aspect of dream-fancy which need occupy us here, and of this it will suffice to say very little. I refer to the tendency of dream-consciousness to magnify and exaggerate the feelings and images which present themselves. One side of this exaggeration has already been dealt with in accounting for the objective reality ascribed to dream ideas. We have now to consider, not why these ideas should be taken for realities, but why they should be so disproportionate to the sensations and other feelings which are their exciting causes, and to the experiences of waking life which serve as their source and prototype. This characteristic of dream-fancy has frequently been dwelt on, and has been fully illustrated by Herr Volkelt in the work already referred to. To give an example or two:—In interpreting bodily sensations, there is often the most grotesque exaggeration. A movement of the foot is taken for a fall of the whole body down some terrible abyss. In M. Maury's experiments, as I have already remarked, when the sleeper's lips were tickled the sensation transformed itself into an imagination of some excruciating torture. Again, the objects of our waking emotions seem to grow

and expand in our dreams. The sick friend who causes us a solicitude becomes to our dream-fancy overwhelmed with the most terrible sufferings, or the classic city in which we lately lingered returns to us in sleep, with its warm tints and picturesque outlines, beautiful above all earthly reality. To our frequent dream-terror forms appear of so vast a size and dire a mien, that we try in vain, perhaps, to connect them with any waking perceptions. In many dreams, as Herr Volkelt observes, we may clearly observe the process of exaggeration going on. In dreams of terror, to which, like many other children, I was greatly liable, I frequently saw forms which gradually swelled out into unearthly proportions. Another form of this process is illustrated in De Quincey's dreams, in which space seemed to swell before his eyes, through a crowding in of multitudes of objects on his vision. This crowding of images is frequently referable to the subjective stimulation of the optic nerve, which produces the semblance of a number of points of light, called by the Germans the "light-dust." It is very common, too, in dreams, to have a succession of images, of which each new member is more imposing or more impressive than the preceding. Here is an example from Volkelt. He dreamt he gave up his hat and overcoat to an official at the cloak-room of a place of amusement, and noticed that the recipient instantly changed the hat for another. This process of substitution went on till he completely lost sight of his own articles. Thereupon somebody carried a heap of articles of attire out of the cloak-room. He inferred that there was an organized body of thieves at the back, and turned to a policeman. Immediately he became involved in a hand-to-hand conflict with the thieves, and finally was stabbed in the abdomen. Here there is a clear ascending gradation in respect of the terrifying character of the dream.

These various forms of the exaggerating tendency in dreams are to be accounted for by more than one consideration. First of all, since in sleep the area of distinct consciousness or of attention is so greatly circumscribed, the few sensations which happen to penetrate it naturally become exaggerated.

Just as the click of a window is magnified at night when we are seeking the quiet of sleep and our attention is not diverted by other impressions, so any bodily sensation or emotion which enters into the dreamer's consciousness and wholly engages his attention becomes larger, deeper, and intenser than it would be in a waking condition of the mind.

But again, our sensations and other feelings are estimated during our waking states by comparison with one another, and when this comparison is wanting the sensation assumes an undefined and large aspect. Thus sensations of pressure received through parts of the bodily surface which are not habituated to such impressions invariably appear too large. So the cavity formed by the loss of a tooth seems too large to the tongue at first, because its discriminative sensibility in the estimation of distance is but feebly developed. Once more, when under the momentary excitement of a pleasurable or painful emotion, and incapable of judging the feeling by a recollection of previous like emotions, we invariably over-estimate its magnitude. The present sunset always seems more wonderful and more splendid than all its predecessors. Now in dreams sensations and emotions are in a pre-eminent degree isolated feelings, which are incapable of being measured by the play of those ideal or reproductive elements which render our waking impressions distinct and sharp, and hence they tend to appear too large through being undefined. As a consequence of this they assume a greatly transformed aspect, presenting themselves through images which are absurdly disproportionate to their real causes.

Finally, one of the principal exaggerating forces in dream-fancy is the action of a persistent emotional state. We have already seen how such a state serves to single out and to unite the images of the brain. Now this process necessarily involves accumulation and exaggeration. Each new image attracted by a dominant feeling reacts on this feeling, intensifying it, and this enables it to go on piling image on image. Since this process in dream-life is generally quite unchecked by any sense of probability or rational congruity, the result is a scene or an action which far transcends those of our

real experience. It should be observed, too, that the high degree of fusibility which belongs to our dream-images contributes to this effect of preternatural exaggeration, since through the blending of a number of images of a certain emotional color composite images arise which greatly transcend in impressiveness those of our waking experience.

These considerations help to explain what some writers call the "symbolic" nature of dream images. This idea has, no doubt, been greatly exaggerated, as when a German writer, Scherner, contends that the various bodily sources of sensations in dreams reveal themselves to consciousness under the symbol of a house or series of buildings, so that a pain in the head calls up an image of hideous spiders on the *ceiling*, and sensations associated with the intestinal canal symbolize themselves through the image of a narrow alley, and so on. Such theories are too fanciful, and do not appear to correspond to most persons' experience. On the other hand, there is undoubtedly a tendency for certain feelings, more particularly bodily sensations, to present themselves uniformly under the guise of one kind of image. With myself, for example, a sensation of pressure in the heart or lungs very frequently translates itself into an imagination of hastening for a train. This fancy exactly corresponds to one of the most frequent and certainly most intense forms of mental agitation in my waking life. In a similar way one suspects all kinds of sensations during sleep are apt to clothe themselves in fancies which represent the most intense form of that particular mode of feeling. People who strongly dislike contention will often dream that they are involved in some noisy quarrel with their dearest friends. Thus a bodily sensation will tend to symbolise itself under some one form of fancy, varying with the individual's temperament and daily experience.

We are now, perhaps, in a position to explain, in part at least, how it is that the dreams which are excited by bodily sensations so seldom contain any inkling as to the real bodily source of those feelings. For one thing, they present themselves as greatly exaggerated in degree, and consequently in many cases have to be interpreted as feelings of an-

other order. This accounts to some extent for the transformation of pleasurable and painful bodily sensations into the more intense mental emotions. But this is not all. Even in our waking life, we have but a faint consciousness of the bodily seat of the various organic sensations. Distinct localisation of sensation depends on sight and touch. Of these, sight probably does most to give distinctness and permanence to the idea of bodily locality. The internal parts of the body are wholly inaccessible to sight and touch, whilst even many parts of the bodily surface are rarely if ever seen or touched. Moreover, owing to the slight part played by ideas of touch in dreams as compared with those of sight, there is little scope for the representation of those parts, such as certain regions of the back, which are known to touch but not to sight. Hence the frequent remark that in dreams the mind is withdrawn from the body, which means first of all that most of its vague waking knowledge of its bodily organism now fails it, and, secondly, that its imaginative representations are mainly derived from impressions of the eye and of the ear; that is to say, of the senses whose activity is normally accompanied by the least degree of consciousness of the bodily organ concerned, but is concentrated in the perception of some object external to the organ.

In all these processes we see something like a suspension of those higher intellectual activities which serve to regulate our waking perceptions and actions. There is nothing like recognition, inference, or rational interpretation in most of our dreams. It seems almost as if during sleep we returned to the undeveloped mental condition of infancy, with the single difference that our emotions are more various and our images are furnished by a larger field of experience. It has been urged by more than one writer, with a good deal of plausibility, that dreams are representations of a primordial state of intelligence and mental development, as we see it now in children and some of the lower animals. The suspension of the higher intellectual functions and the absence, for the most part, of the higher emotions give support to this theory. Yet this is too wide a subject to be entered into here. My ob-

ject is fulfilled if the foregoing examination of the force of dream-construction has been carried far enough; not, indeed, to account for all the complex aspects of dream-life, but to show that

this life betrays underneath all its apparent lawless spontaneity clear traces of an order impressed on it by ascertainable formative influences.—*Cornhill Magazine*.

HISTORIC PHRASES.

UNSUCCESSFUL, or only partially successful, authors are often treated with apparent injustice when, as may happen, their books are not altogether without merit. In that case their works do not wholly perish. Whatever seems good in them is reproduced by some successful author, who does, or does not, put his own distinctive mark upon what he has taken. Not one of the numerous tribe of unsuccessful authors can repay such attentions as these, or he would be held guilty of plagiarism—an offence which can only be committed with impunity by the rich towards the poor, and by the strong towards the weak. Indeed, if an unsuccessful author, from whom a successful one had borrowed, were to make any fuss on the subject, he would probably be condemned as an impostor, and would in any case be told to hold his peace. There is no harm in this so far as regards the general interest of readers. If ideas, expressions, passages, personages, possess value in themselves, their origin need not be too closely inquired into. They belong to him who has used them with most effect, as in the industrial arts inventions belong to those who have known how to apply them. The first discoverer has every right to pity himself, or to be pitied, for being deprived of the honors of his discovery. But if it has been taken into better hands than his, and better presented than he could have presented it, the public are gainers by the transfer, in however arbitrary and even unjust a manner it may have been effected.

Similarly, if the same remarkable phrase has been spoken by two different men, the more celebrated will have the sole credit of it. This habit, however, on the part of the European public of "lending to the rich" may be carried too far. Some measure should be observed; and though a great man may be allowed to borrow, if such be his will, nothing should be given to him which

he himself even has never claimed. Care, too, should be taken not only not to give him the property of others, but, in giving him his own, to give it to him in its proper form. When the very words spoken are cited as coming from the man who really spoke them, it is further desirable that their meaning should not be perverted; as may well happen in the case of paradox-makers, whose paradoxes, made thoroughly clear, would often lose all point.

Several historic sayings have been set right ("Tirez les premiers, Messieurs les Anglais," for instance), and others (as "Moriatur pro rege nostro, Maria Theresa,") altogether demolished by Mr. Carlyle; who of others again has exposed the absurdity. The unseemly question put by Le Père Bouhours, as to whether a German can be witty, has drawn down upon him a few replies calculated to make him wish, were he still in the flesh, that he had never raised the inquiry. Mr. Carlyle's answer, however, had really been anticipated by the facetious father himself, who, after asking in *Les Entretiens d'Ariste et d'Eugène*, "Si un Allemand peut avoir de l'esprit?" adds: "Ce n'est pas que je veuille dire que tous les septentrionneux soient bêtes; il y a de l'esprit et de la science en Allemagne comme ailleurs; mais enfin on n'y connaît point notre bel esprit, ni cette belle science qui ne s'apprend point au collège, et dont la politesse fait la principale partie; ou si cette belle science et ce bel esprit y sont connus, ce n'est seulement que comme des étrangers dont on ne connaît point la langue et avec qui on ne fraye point d'habitude."

Le Père Bouhours is often credited, as are also Dumarsais and Malherbe, with the "Je m'en vais ou je m'en vas" of the dying grammarian, who goes on to explain that "l'un et l'autre se dit ou se disent."

The number of characteristic stories

told of similar persons under similar circumstances is indeed very large. Of Julius Cæsar landing in Africa, of William the Conqueror landing in England, of Edward III. landing in France, it is equally narrated that they fell, and to avert all appearance of an evil omen, affected to seize the earth on which they had stumbled.

Henry IV. of France and a certain mayor were so much alike, that the king could not help saying to his counterpart, "Did your mother ever visit our part of the country?" "No," replied the mayor, "but my father did." The same anecdote is related of the Regent Orleans, who stands for Henry IV., and a Scotch gentleman, who replaces the mayor; and the original of both tales is to be found in the *Saturnalia* of Macrobius.

The comprehensive directions given by the Pope's legate at the massacre of the Albigenses, "Tuez tous; Dieu reconnaîtra les siens," are also said to have been given at the massacre of St. Bartholomew. Here of course there is a confusion of two different events. But the phrase which belongs to the one is not morally unsuitable to the other, and there is a natural tendency to connect it with the massacre of which most is known. M. Louis Blanc has committed this error in a passage cited without disapproval or even correction by M. Larousse in his *Fleurs Historiques*. Many stories told of the Polish insurrection of 1830 were afterwards told, with but slight variation, of the Polish insurrection of 1863; and the details of the massacre of Scio would fit only too well into a general narrative of the recent massacres in Bulgaria.

The period of the French Revolution abounds in historical phrases. One of the most celebrated of these, the exhortation said to have been addressed at the moment of his death to the king by the Abbé Edgeworth, "Fils de Saint Louis, montez au ciel!" was never uttered. The abbé, questioned on the subject, did not remember having said anything. If he had spoken, the roll of the drums would have prevented his being heard.

Nor did the Abbé Sièyes, when the king was being sentenced by his judges, write in the register, "La mort sans phrase." The others for the most part appended to the sentence of death a few

words setting forth their motives or reasons—such as "Parceque il a trahi." Sièyes, however, wrote simply "La mort," to which was added in *Le Moniteur*, as if to show that nothing had been omitted, "sans phrase."

A well-known historic phrase of this epoch, denied by its reputed author as soon as he saw it in print, but which continues to be attributed to him all the same, is the "Finis Poloniæ," supposed to have been pronounced "when Kosciuszko fell." Freedom may have "shrieked" on that occasion, but Kosciuszko did not exclaim "Finis Poloniæ." In the first place, as he wrote to Count Ségur, who had given publicity to the story in his *Décade Historique*, he was all but mortally wounded, and could not speak. If, however, he had retained the faculty of speech, he would certainly not have had the presumption to exclaim "Finis Poloniæ," since neither his death, nor the death of any one else, could be for Poland a fatal misfortune. It would be interesting to know who invented "Finis Poloniæ," which seems to have reached Count Ségur by common report. Kosciuszko repudiated, in any case, both the words and the idea. It may be here mentioned that a celebrated phrase which M. Fournier in *L'Esprit dans l'Histoire* (Paris, 1857), and M. Larousse, in *Les Fleurs Historiques*, both attribute to a writer in the *Journal des Débats*, really belongs to a Pole. Two centuries and a half before "Le roi règne, et ne gouverne pas," was written, John Zamoyski had said, only too truly, in the Polish Diet, of the Polish King, "Rex regnat, sed non gubernat."

Most of the sayings which pass for Napoleonic did really proceed from Napoleon, and are to be found in his correspondence or in authentic records of his speeches and conversations. But "Grattez le Russe, vous trouverez le Cosaque" was first said by the Prince de Ligne; and when Napoleon called England "La nation boutiquière," he had been in a measure anticipated by Sir Philip Francis, who, in the debate on the armament against Russia, denounced his countrymen as "a nation of stock-jobbers." "Il faut laver son linge sale en famille" was a piece of advice addressed, in a furious speech, to the Chamber of Deputies during the crisis

which followed the disasters of 1814. "What is the throne? Four pieces of wood covered with velvet!" exclaimed Napoleon on the same occasion. This was new. But "Wash your dirty linen at home" had been said (as M. Fournier points out) by Voltaire in the very words which Napoleon was afterwards to employ. "In fifty years Europe will be Cossack or Republican" is a very precise forecast, which, if a true one, ought now to be on the point of being verified. Another prediction on the same subject, "Woe to Europe when the Czar of Russia wears a beard!" is less absolute, more mysterious, more picturesque, and finer in every respect. The beard prophecy, moreover, has gained in significance since it was first uttered. The Slavonian and Pan-Slavonian idea had at that time scarcely been conceived, and to Napoleon at St. Helena was certainly unknown. Few even among the Russians had learned that the Poles, the Czechs of Bohemia, the Croats and other Slavonians of Hungary, the Servians and the Bulgarians, were of the same race as themselves. At present, however, if a bearded Czar were to head a great national movement, he would do so not as Emperor of Russia, but as Emperor of the Slavonians. Fortunately, Alexander II. shaves. Central Europe, too, thanks to Napoleon's imperial successor, is more strongly constituted than it was in 1815.

Napoleon's most characteristic sayings are more impressive than dazzling, and more Oriental than French. He never troubled himself to manufacture paradoxes such as Talleyrand delighted in. Not, however, that all Talleyrand's paradoxes were original. "Language was given us to disguise our thoughts," like so many witticisms of all kinds, is by right of invention the property of Voltaire; and M. Fournier tells us that before Talleyrand appropriated it, it had been made into an epigram by Lebrun. Harel, at that time editor of *Le Nain, Jaune*, published it in his journal, and, for the sake of "actuality," assigned it to Talleyrand, who, seeing that it was good, accepted it. Talleyrand, according to Harel's story, was waited upon by an ingenious youth who wished to enter the diplomatic service, and who, to recommend himself, assured the minister

that he was in the habit of saying precisely what he thought. Thereupon Talleyrand informs him very gravely that language was given to man to enable him to conceal his thoughts. The becoming manner, by the way, of attaining this end seems to have been indicated by Talleyrand when he remarked, one evening at Holland House, that Cardinal Mazarin "deceived, but did not lie," whereas M. de Metternich, he added, "always lied, and never deceived." This was said in presence of Lord Macaulay, and may be found recorded in Mr. Trevelyan's recently published volumes.

M. de Talleyrand was, according to M. Fournier, a constant student of a jest-book in twenty-one volumes, entitled *L'Improvisateur Français*, in which, says the author of *L'Esprit dans l'Histoire*, the best joke is the title. Refreshing his memory and fertilising his wit by means of the anecdotes gathered together in his favorite work, Talleyrand was never at a loss for an impromptu. His biographer, M. de Vaulabelle, repudiates some of the sayings generally attributed to him, including the famous comment which he is supposed to have pronounced on the execution of the Duke d'Enghien: "C'est pire qu'un crime, c'est une faute." On the other hand, he invented, or at least presided at the invention of, a sentence destined to become historical, which was printed as forming part of the speech delivered by the Count d'Artois on receiving the great dignitaries of state in 1814. The Count had muttered some nearly unintelligible and quite insignificant words. It was necessary, however, to represent him as having said something striking, something worthy of the occasion; and M. Beugnot, who as Minister of the Interior superintended the publication of the *Moniteur*, was requested by Talleyrand to "invent." Beugnot invented first one thing, then another, until at last he delivered himself of a sentence commencing, "Rien n'est changé. Il n'y a qu'un Français de plus . . ." That was enough. Talleyrand finished the sentence at "plus," and the *mot* was made. The Count d'Artois, less candid than Talleyrand would have shown himself in similar circumstances, declared that he did not remember having said

anything of the kind. He was reminded, however, that the words were actually in print, that the newspaper could not very well have made a mistake, and so on; and he was ultimately reduced to silence by the repeated congratulations of his friends. Besides being witty himself, Talleyrand is popularly believed to have been the cause of wit, and wit of a diabolical kind, in one who was not much given to satire, even on occasions when satire would have been permissible. Talleyrand having complained on his death-bed that he was "suffering the torments of the damned," "Already?" Louis Philippe is reported to have exclaimed. M. Louis Blanc tells the story as though it were unquestionably true, in his *Histoire de Dix Ans*, and adds, that to revenge himself Talleyrand lost no time in delivering to a friend papers which contained important state secrets. The anecdote, however, was already very old; and one narrator, M. de Lévis, who places in the mouth of a doctor at his patient's bedside the inquiry attributed by M. Louis Blanc to Louis Philippe, expresses a reasonable doubt as to whether anything so heartless could have been said.

No one seems to have corrected, on the part of Louis Philippe, M. Louis Blanc's account of Talleyrand's last interview with his king. When, however, some one wished to deprive M. Salvandy of a phrase which he had perhaps been at some pains to elaborate, he wrote to the papers on the subject. He declared that at the ball given to the King of Naples immediately before the revolution of 1830, it was he and no one else who said: "The entertainment is quite Neapolitan; we are dancing on a volcano."

Not many months afterwards an announcement was made to the Chamber of Deputies, which when once it had been uttered, its author would gladly, no doubt, have seen placed to the account of anyone but himself. In answer to inquiries as to the condition of affairs in Poland, General Sebastiani informed the Assembly that "order reigned in Warsaw." In our English newspapers these words are usually attributed to the Emperor Nicholas, who is probably supposed to have addressed them to one of the foreign ambassadors at St. Petersburg. They were not indeed very be-

coming in the mouth of a minister of one of the intervening powers; and it is their very inappropriateness that has caused them to be remembered.

"Order reigns at Warsaw" is the sort of thing the Emperor Nicholas might have said, and the credit of it will doubtless remain with him. It is thought quite natural, too, that Blücher, on viewing London from the top of St. Paul's, should have cried out "What a place to plunder!" According, however, to another version, his words were "My God, what plunder!" in which case he would not have meant that the idea of sacking London had suddenly occurred to his brigand-mind, but merely that he was much struck by the mass of heterogeneous objects around him. The German substantive *plunder* does not signify booty at all.

To return for a moment to the Emperor Nicholas: his comparison of Turkey to a sick man was by no means new. In likening the Ottoman Empire to a sinking patient, he was only repeating to Sir Hamilton Seymour what Sir Thomas Roe, Ambassador from England in the time of James II. at Constantinople, had written home in despatches. "Turkey," said Sir Thomas, "is like the body of an old man crazed with vices, which puts on the appearance of health, though near its end." The main difference between the Turkey of the present day and the Turkey of two centuries ago lies perhaps in the fact that the Ottoman Empire does *not* at this moment present the appearance of health.

The Crimean War produced a certain number of historic phrases, such as "C'est magnifique, mais ce n'est pas la guerre"—cited too often and too complacently; MacMahon's "J'y suis, j'y reste," which only seems to have been remembered since the Marshal's elevation to the highest dignity in France; and the late Prince Gortchakoff's "feu d'enfer" as descriptive of the fire under which the Russians retired from the south of Sebastopol. The English, as usual, contented themselves with deeds. In the British Parliament, however, an expression, which has since become historical, was used by the Duke of Newcastle in reference to the beginning of the war—into which we were said to be "drifting." Like so many other historical

phrases, this one in time lost its original meaning, and is now perversely misinterpreted as signifying, not that the negotiations took a course which led gradually to a declaration of hostilities, but that the country fell into a state of war, without guidance, and independently of the wishes of the Government.

Cavour's "Italia fara da se" became strangely celebrated, considering that Italy never did and never could have done anything by herself. It inspired other nations with the idea of "doing by themselves," and unhappy Poland did for herself in the insurrection of 1863. The conscription which precipitated the rising was denounced by Lord Russell (at second hand) as a "proscription." Lord Russell, indeed, has made many points, apart from the six which he presented in 1863 to Prince Gortchakoff. "To be conspicuous by its absence," is a happy rendering of "briller par son absence;" and the "wisdom of many, the wit of one," as the definition of a proverb, is almost as good as Pope's definition of wit, which it very much resembles. In France during the late war it was universally believed that on entering French territory the King of Prussia had proclaimed himself the enemy, "not of France, but only of the emperor." He had done nothing of the kind. But Napoleon, to whom the text of the proclamation could scarcely have been known, seems to have adopted the popular version of it, and to have imagined that some useful end might be served by his surrendering himself personally, apart from his army. Repeated day after day in hundreds of newspapers, the story of the king's "solemn declaration" took such hold on the French mind that it will now in all likelihood never be dislodged. The true version of the proclamation to the inhabitants of occupied districts, telling them simply that war was being waged against the French troops, and not against inoffensive citizens, must, since the peace, have been read by many thousands of Frenchmen. But the false version had been read, again and again, by millions; and it seems still to be accepted. At least M. Auguste Vacquerie, writing on the subject of the Bayreuth Festival (which at first sight does not seem very intimately connected with the German campaign in

France), has lately reminded the readers of *Le Rappel* that "on the eve of entering France the King of Prussia declared solemnly that he did not make war against France, but against the emperor."

The war between France and Germany produced but few historic phrases. Such *mots*, however, as it really called forth were all uttered on the French side. "Pas un pouce de notre terrain, pas une pierre de nos forteresses!" would have been admirable, if the refusal so pointedly expressed could have been maintained. As it is, M. Favre's clever phrase may be classed with General Ducrot's—"I shall return dead or victorious," and with "La Garde meurt, et ne se rend pas;" though at Waterloo some of the Guards did indeed die, while a great number surrendered. It has lately been shown that General Ducrot's boastful proclamation was composed in his absence, apparently by the author of "Pas un pouce," &c., and attributed to him without his consent or knowledge; as "La Garde meurt," &c., was equally without justification attributed to Cambronne.

Among the Emperor Napoleon's utterances in connection with the war, "Old soldiers wept at seeing him so calm," has been preserved by German caricaturists; and Mr. Gladstone has thought fit to save from oblivion, "Tout peut se rétablir," in one of his Majesty's telegrams.

Napoleon's letter of surrender will of course be remembered as an historical document of the highest interest. A great writer reproducing its substance many years afterwards for the first time could doubtless have improved upon it, could possibly have done for it what the Spanish historian did for Francis I.'s letter after Pavia. But the Emperor's words, or something very like them, were at once made public, and they are certainly superior to what Francis I. wrote in a somewhat similar plight. Francis's letter was, it is true, intended only for his mother, whereas Napoleon's letter was addressed to the whole world, or was at least written in the consciousness that the whole world would read it. With all the changes necessary to suit the facts of the case, nothing in the style of "Tout est perdu fors l'honneur," or "La Garde meurt, et ne se rend pas,"

would have been suitable to the occasion; and without being unduly precise, or emphatic, or otherwise theatrical, the Emperor could scarcely have declared in fewer words than he employed that, unable to find death, he accepted captivity. As a proof of the tendency of things to go wrong, even when deviation from the right course would seem next to impossible, it may be mentioned that at least four different versions of the Emperor Napoleon's letter have been published. In some he lays his sword at the feet, in others, places it in the hands of the Prussian king. In a manuscript copy circulated the night of the battle, not many hours after the receipt of the original, the writer made the Emperor declare himself incapable of dying at the head of his troops. "N'ayant pas *su* mourir," instead of "n'ayant pas *pu* mourir," it began; and probably this edition, presenting at least one notable variation from the genuine text, found its way, like so many others, into print.

The Emperor William received and left behind him at Versailles, a number of letters, more or less anonymous, in which he was taunted with having continued the war after the capture of the man against whom alone he pretended to have undertaken it. On the margin of one of these epistles, in which he was addressed familiarly in English as "Old Rascal!" the Emperor had written, "Je n'ai jamais dit cela;" and his Majesty's chief minister has repeatedly found it necessary to meet similarly unfounded accusations with a similar reply.

If proclamations and letters are falsified in time of war, and falsified so rapidly that incorrect copies get into circulation before the ink of the original document has had time to dry, speeches, sayings, and utterances of all kinds are liable to the same fate in time of peace. In France, and not in France alone, nothing is more generally believed of Prince Bismarck than that he once, in the Prussian Chamber, declared the superiority, or rather the priority, of "might" to "right": "Macht vor Recht," or, as the French put it, "La force prime le droit." Times out of number, Prince Bismarck has written to deny that he ever uttered what in one sense would be a mere truism (since every right is pre-

ceded by and based on some kind of force), in another a simple barbarism; until at last the very frequency of his contradictions, and the necessity, constantly renewed, of having to make them, has been used as an argument against him. The terrible "blood and iron" through which alone a nation can gain its rights, is known to be an expression borrowed from a German poet, in whose verse it means neither more nor less than—

"Who would be free, himself must strike the blow."

in O'Connell's favorite couplet.

The saying, attributed to M. Thiers, about the advantages of the Republican form of government in France as "the one which divides us the least," had not, when it was first pronounced, the meaning given to it now. M. Thiers, as a Royalist, made the remark, since turned against the monarchical party; and what he said was: "The Republic is the form of government which divides us (the Royalists) the least, and which disunites them (the Republicans) the most." In other words, "Monarchists of all kinds will combine against a Republic; but, a Republic once declared, Republicans will quarrel among themselves." At present the first half of M. Thiers's epigram is alone quoted; and, true or false, the pointless phrase, as now interpreted, suits the existing situation.

No man of true wit, when a good thing has been given to him, or has even been taken possession of by himself, likes to be afterwards deprived of it for the benefit of the rightful owner. Thus when Mr. Disraeli's eulogium on the Duke of Wellington, including his essay on the character of a general, was shown to M. Thiers, that eminent statesman at once protested that it must be his: "Ca doit être de moi," he exclaimed; though it afterwards turned out to be Armand Carrel's.

Lord Beaconsfield is the author of innumerable phrases which have made their mark. The writer, however, of a very interesting article in a recent number of *Fraser's Magazine* has shown that Mr. Disraeli sometimes "*prenait son bien*," like Molière, wherever he chanced to find it. When Mr. Disraeli called our street cab "the gondola of London," he

borrowed the phrase from *Friends of Bohemia*, a wild, brilliant novel by the late Edward Whitty. Mendelssohn, too, had described Cherubini as looking like an "extinct volcano" long before Mr. Disraeli discovered in the House of Commons a whole row of "extinct volcanoes."—*Macmillan's Magazine*.

KING HENRY'S HUNT.

A BALLAD.

KING HENRY stood in Waltham Wood,
One morn in merry May-time;
Years fifteen hundred thirty-six,
From Christ, had roll'd away time.

King Henry stood in Waltham Wood,
All young green, sunny-shady.
He would not mount his pawing horse,
Though men and dogs were ready.

'What ails his Highness? Up and down
In moody sort he paceth;
He is not wont to be so slack,
Whatever game he chaseth.'

He paced and stopp'd; he paced and turn'd,
At times he inly mutter'd;
He pull'd his girdle, twitch'd his beard;
But not one word he utter'd.

The hounds in couples nosed about,
Or on the sward lay idle;
The huntsmen stole a fearful glance,
While fingering girth or bridle.

Among themselves, but not too loud,
The young lords laugh'd and chatter'd,
Or broke a branch of hawthorn-bloom,
As though it nothing matter'd.

King Henry sat on a fell'd oak,
With gloomier eyes and stranger;
His brows were knit, his lip he bit;
To look that way was danger.

Mused he on Pope and Emperor?
Denied them and defied them?
Or traitors in his very realm
Complotting?—woe betide them!

Suddenly on the south-west wind,
Distinct though distant, sounded
A cannon shot,—and to his feet
The King of England bounded.

My horse!' he shouts,—'Uncouple now!'
And all were quickly mounted.
A hind was found; man, horse, and hound
Like furious demons hunted.

Fast fled the deer by grove and glade,
The chase did faster follow;
And every wild-wood alley rang
With hunter's horn and hollo.

Away together stream'd the hounds;
Forward press'd every rider.
You're free to slay a hind in May,
If there's no calf beside her.

King Harry rode a mighty horse,
His Grace being broad and heavy,
And like a stormy wind he crash'd
Through copse and thicket leavy.

He rode so hard, and roar'd so loud,
All men his course avoided;
The fiery steed, long held on fret,
With many a snort enjoy'd it.

The hind was kill'd, and down they sat
To flagon and to pasty.
'Ha, by Saint George, a noble Prince!
Tho' hot, by times, and hasty.'

Lord Norfolk knew, and other few,
Wherefore that chase began on
The signal of a gun far off,
One growl of distant cannon,—

And why so jovial grew his Grace,
That erst was sad and sullen:
With that boom from the Tower, had fall'n
The head of fair Anne Bullen.

Her neck, which Henry used to kiss,
The bloody axe did sever;
Their little child, Elizabeth,
She'll see no more for ever.

Gaily the King for Greenwich rides;
Each moment makes his glee more;
He thinks—'To-morrow I'm betrothed,
At last, to young Jane Seymour!'

The sunshine falls, the wild-bird calls,
Across the slopes of Epping;
From grove to glade, through light and shade,
The troops of deer are stepping.

Fraser's Magazine.

SECULAR CHANGE OF CLIMATE.*

Of the many facts in physical geography which modern study has brought to light, none, perhaps, is more startling than the certainty that, in former ages, the climate of the earth has been very different from what it now is. Our forefathers had so accustomed themselves to the idea that the present is the natural order of things, that heat and cold are the essential and necessary characteristics of the tropical and arctic zones, that they received with incredulity the announcements of geological discoveries which seemed to speak of widely different conditions; and maintained that the remains of tropical beasts or plants found, as in our country, must have been carried there in some convulsion or cataclysm, probably by the great deluge itself.

This state of doubt, incredulity, and unbelief has long since passed away, and it is now well known, not only by professed students of geology and geography, but by the general reader, that from the earliest ages the climate, as well as the surface of the earth, has been subject to continual change. The knowledge, however, is a living reality to but few. The fossils of the coal-fields have indeed long accustomed the public to the idea of a period of great warmth, an idea accepted the more readily as in apparent unison with the received belief in the once molten state of the globe, which was thus supposed to have been still cooling down to its present temperature within comparatively recent times; but the idea of frequent alternations, of periods of great cold succeeding or preceding periods of great warmth, is one of which indeed many may have read or heard, but without, by any means, fully grasping the meaning of it.

In fact, the old notion, as formulated

by Sir David Brewster, that temperature, and climate as depending on temperature, is a simple function of the latitude, has stood very much in the way, and has rendered it difficult for any more exact statement to win belief; so that even now the great difference between the climates of places on the same parallel, such as Labrador and England, is an every-day source of wonder and vague guessing. But the experience of modern geographers has shown that such irregularities are the rule, and the labors of geologists have proved that, in past ages, climate has varied and alternated in almost every possible way, from the poles to the equator. The geological record is in many places obscure, in many places altogether obliterated; but enough remains to establish the general truth of the proposition, and to propound it as a physical problem of no less interest than difficulty.

It is the interpretation of this record, the investigation of this problem, that the authors of the two works which we have named above have attempted. They have done so in a patient and earnest manner, searching after truth with a zeal that recognizes no hindrance, with a practised skill that luxuriates in difficulties; and they have given us books of an interest more thrilling than the most sensational tale of broken vows or violated commandments which has gone the round of the circulating libraries. Mr. Geikie's book, indeed, is principally historical or descriptive, and is eminently readable and intensely exciting; but Mr. Croll's will scarcely meet with such popular acceptance, for though its interest is, if possible, even greater than that of the other, it bristles with facts, and arguments, and stern arithmetic, which will delight the earnest student, but will be as a quickset hedge from which the mere casual reader will turn in dismay. For such, the book does not profess to be written; and whilst we would call special attention to it, as well as to its fellow, as both requiring and deserving a careful examination, we think we shall be doing the world of letters good service in presenting to it

* (1.) *The Great Ice Age, and its Relation to the Antiquity of Man.* By JAMES GEIKIE, F.R.S.E., F.G.S., of Her Majesty's Geological Survey of Scotland. 8vo. London. 1874.

(2.) *Climate and Time in their Geological Relations: a Theory of Secular Changes of the Earth's Climate.* By JAMES CROLL, of Her Majesty's Geological Survey of Scotland. 8vo. London. 1875.

some account of the subject-matter of these very remarkable works, whose publication may be said to mark a scientific epoch.

We would not, of course, be understood to imply that the phenomena treated of in these works are now for the first time described and discussed. So far from this being the case, the outline of the facts has been before the public for more than thirty years, and their interpretation has been investigated by most of the leading geologists of Europe and America, and more particularly in our own country by Lyell, Ramsay, and Archibald Geikie, the elder brother of one of our present authors. But in the writings of all these, the subject of climate has been more or less subsidiary to some other principal design, an incidental episode or illustration in the body of some more general essay, and its details have not been worked out in a comprehensive and collected manner. In this sense 'The Great Ice Age' and 'Climate and Time' form the first complete exposition of these phenomena and their correlative theories, and have thus a distinct value, irrespective of the skilled labor and scientific acumen which have been brought to bear on the complex problems under consideration.

When the early dispute between the rival claims of fire and water began to die out, and the less sensational theory of Sir Charles Lyell made its way, geologists perceived that there were many facts which neither fire nor water, nor any other familiar agency, could explain; such, for instance, as huge angular boulders found many hundreds of miles from the place of their origin; heaps of rough stones or of dirt piled up or scattered about in situations where water could not have carried them; fixed rocks, smoothed, rounded, polished, and regularly scratched; or vast quantities of finely-ground and well-kneaded but unstratified clay intimately mixed up with stones scratched and polished as the rocks. And yet these appearances, common over the whole of Northern Europe and America, are peculiarly so in our own country: the clay, especially, is a distinct geological feature of a great part of the Scottish lowlands, where it is known as 'till,' and of England, where it has been more commonly called

'boulder clay;' but its characteristics are everywhere the same; it is a firm, tough, tenacious, stony clay, more objectionable to engineers than the hardest rocks. These phenomena were the subject of much debate: it was only by slow degrees that the prejudices of habit and of former modes of thought could be overcome, and it became recognized that ice was the one and only agent in nature which could give rise to them.

Long observation in Switzerland, where glaciers still exist, showed that the grinding and kneading of the clay is even now going on; that rocks are even now being smoothed, rounded, polished, and scratched; that irregular heaps of stones are being piled up as lateral or terminal moraines; and that enormous boulders are being carried far from their parent cliff. More exact observation showed that the glaciers of modern Switzerland are mere pigmies in comparison with those which must have existed long ago, and pointed out the moraines of the past, identical in fashion with those of the present, the rounded and scratched rocks, the transported boulders, and all the other marks which the modern glaciers could be seen duly registering. Here then was the key: the marks in England, in Scotland, in Denmark, in Norway or Sweden, were identical with those found in Switzerland, and there clearly recognized as made by an extended system of glaciers. But it was difficult to believe that glaciers of a size at all adequate to produce the observed effects could ever have existed in this temperate and low-lying part of Europe; and even to those who were prepared to admit the effect of glacier action, there were many apparent contradictions which seemed to render the proposed theory untenable. Still, the enormous power of ice, both to carry and to grind, was generally admitted; and it was eagerly and positively maintained that the particular form of ice which had, in past ages, been at work in this part of the globe, was that of bergs borne on an arctic current.

This did not seem to involve any extreme change of climate. It was well known that on the other side of the Atlantic, bergs of an enormous size annually come down to a much lower latitude than ours, and that in the south they approach very near to the Cape of Good

Hope. There was, therefore, little difficulty in the way of admitting the possibility of icebergs coming out of the arctic, and drifting on their way over such parts of this country as happened at the time to be under water. An able and popular writer enlarged on this idea a few years ago, in that most interesting work, 'Frost and Fire,' and argued that the precise track of these icebergs was over what is now Russian Lapland, then the bottom of the sea, down the Gulf of Bothnia, and so out over the submerged south of Sweden, Denmark, and England.

Plausible as Mr. Campbell's theory undoubtedly is, and though in many respects ingenious and suggestive, it is none the less founded on fancy rather than on observation, and has not stood the test of severe scientific scrutiny. Indeed, when such scrutiny is uncompromisingly carried out, it is found that there is no evidence at all showing that icebergs do or can smooth, round, polish, or even regularly scratch rocks over which they pass; there is no evidence at all showing, or tending to show, that they ever grind over rocks in such a way as to produce any of these effects in the very slightest degree. The evidence is indeed rather to the contrary, that they do not and cannot grind along the bottom; that they either float freely or bring up with a violent shock, that may smash, or contort, or plough up the bottom, but most certainly does not mark it with long series of fine scratches, or *striae*.

These *striae* are amongst the most common of ice markings; they exactly resemble those now made by glaciers; they therefore may have been made by glaciers; and no other natural agent is known by which they can have been made. The necessary inference then is that they were made by glaciers; that the ice which has crushed and ground the surface of our country, not only on the mountains, but on the lowlands, was land ice; and that therefore the climate of this part of the world was, at that time, such as to admit of land ice in very large masses. When the various glacial phenomena are examined step by step, in full detail, it is found that the action of land ice will explain them all, if only it can be supposed to have been in sufficient quantity; but the great difficulty

has been in the conception of the enormous extent of ice which must have been at work. Glaciers, as ordinarily understood, are quite insufficient; and the idea, stupendous as it seems, which has been gaining ground, and which is now very generally held by all competent geologists, is that at the period of this world's history to which these glacial phenomena are to be referred, the whole adjacent surface of the earth was covered, to the depth of several thousand feet, with one solid mass of ice.

So far as Europe is concerned, the ice-cap extended over the greater part of Germany, Sweden and Norway, the Baltic, Denmark, the North Sea, Great Britain and Ireland, and seaward for some distance into the Atlantic, where it terminated, probably near the present hundred-fathom line, in an ice-wall or cliff, not unlike that now existing in the Antarctic Ocean. This is, in bare outline, the description of North-western Europe in what is known as 'the glacial period;' whilst further south and east the glaciers of the Alps, Apennines, and other mountain ranges, even as far as the Lebanon, had an exaggerated development. The condition of North America was similar: the ice covering extended in one unbroken sheet as far as the parallel of 40° , and reached in exceptional though enormous glaciers to a much lower latitude.

The evidence however stands out very clearly that these masses of continental ice were not connected; that they were not parts of a huge ice-cap covering the pole, and stretching down to the parallel of 40° or 50° . The *striae* left in the far north of Lapland lead down towards the Arctic Sea; those in the north of Scotland also lead north; those in the east lead east, towards the North Sea. It would appear that the bed of this sea was the low-lying part of the enormous glacier, slowly creeping north, and terminating beyond the Shetland Islands, in a continuation of the Irish ice-cliff. In the southern hemisphere the action of ice in a manner equally beyond present possibility is also well attested; though the comparatively limited area of land, and the relative scantiness of observation even over that limited area, prevent our attempting to trace its extent.

It is difficult to accept the idea of such a climatic condition, whether in the northern or southern hemisphere, an idea so utterly subversive of all preconceived notions. What! one might be tempted to exclaim,—England with a climate like that of Greenland! As well speak of Greenland with a climate like that of England. A climax of absurdity; and yet it is exactly this change which has taken place. We cannot get rid of evidence by, ostrich-like, ignoring it. The evidence of this remarkable change of climate is overwhelming, and though its extreme copiousness prevents our even attempting to recapitulate it, we may illustrate the general statement of fact by calling attention to some of its more salient features.

Glaciers, such as we now know them in Switzerland, may be properly called rivers of ice: they descend from the sides of mountains into valleys, and continue their course down the valleys until they reach their bounding limit. Whatever may be eventually proved to be the cause of the motion of glaciers, it is quite certain that the downward force of gravity plays an important part in it; hence, when blocks of stone fall on to, or become imbedded in, a glacier, they descend with it, and when left by the melting ice, are almost necessarily at a lower level than their origin. But the travelled blocks now found in many parts of Europe do not correspond to this condition: they are frequently found at a higher level, and in positions such that they must have passed over hill ranges of considerable altitude. Amongst these, special mention is made of a large mass of mica-slate, at a height of 1,020 feet on the Pentland Hills, which must have come from fifty miles to the north or eighty to the west. Boulders of highland rocks have been found on the northern slopes of the Lammermuir Hills, and on the crests of the hills between the valleys of the Clyde and the Irvine. These blocks passed not only over wide valleys, such as the Forth or Clyde, but over the Campsie or Ochil Hills; and if we admit that ice was the carrying agent, it is clear that the valleys must have been filled up, and the intervening hills buried in the one sea of ice which swept down from the highlands over the low country. And whilst the scratching,

polishing, and rounding of rocks, everywhere noted, as well as the mingled and confused mass of ground clay and stones, may be considered as certain proofs of glacier action, the portage of these and many other boulders over vast distances, across wide valleys or even seas, and up steep slopes, is conclusive as to the stupendous size of the glaciers which performed the work.

The evidence of a once genial climate in the now ice-bound Arctic is equally conclusive. The readers of arctic voyages—and during the last twelve months they have been numerous—will be familiar with McClure's discovery of the remains of a forest of pine trees on the northern shores of Banks Land, in latitude $74^{\circ} 48'$, 300 feet above sea level. 'From the perfect state of the bark,' he wrote, 'and the position of the trees so far from the sea, there can be but little doubt that they grew originally in the country.' Many other instances have been noted; and though some eminent geologists, including the late Sir Roderick Murchison, have suggested the possibility of these trees having been drifted there, as perhaps from the mouth of the Mackenzie, such a supposition demands a sea nearly clear of ice, which would itself speak of a widely different climate.

But the tree found by Sir Edward Belcher, near the northern end of Wellington Sound in latitude $75^{\circ} 32'$, and longitude 92° W., about a mile and a half inland, is conclusive against this supposition. It was unmistakably *in situ*, and was dug out of the ground, with the soil immediately in contact with its roots. When brought home, it was examined by Sir William Hooker, whose report is curious. 'The structure of the wood,' he says, 'differs remarkably in its anatomical character from that of any other conifer with which I am acquainted.' The peculiarity, described at great length, consists in the division of each concentric ring, or annual growth, into two zones, of which the inner, or first formed, must be regarded as imperfectly developed, being deposited at a season when the functions of the plant are very intermittently exercised, and when a few short hours of sunshine are daily succeeded by many of extreme cold.' In the outer zone, on the other hand, formed whilst the sun's heat and light are con-

tinuous throughout the twenty-four hours, the wood fibres are more perfectly developed than is usual in the natural order to which this tree belongs.

Of a much earlier age, but bearing evidence to a still milder climate, are the coal measures, which, as is well known, have been found in many parts of the arctic regions, and notably in Melville Island, latitude 74° - 76° ; and corals, found, amongst other places, in Beechy Island. Almost still more startling are the ammonites, which have been found in great numbers, in widely different parts; by Lieutenant Anjou of the Russian navy, on the southern shores of New Siberia, in latitude 74° , and by Captain McClintock, at Point Wilkie in Prince Patrick's Land, latitude $76^{\circ} 20'$. These last were examined by Professor Haughton. 'It appears to me,' he says, 'difficult to imagine the possibility of such fossils living in a frozen, or even a temperate sea. All idea of accounting for the occurrence of such remains by drift must be abandoned, as the fossils found by McClintock were unquestionably *in situ*, and it is impossible to evade the consequences that follow to geological theory from their discovery.'

Equally strong is the evidence of a tropical or semi-tropical climate in England and the neighboring parts of Europe. The fossil remains of animals peculiar to tropical climates, huge carnivora—lions, tigers, spotted hyenas—which require not only warmth, but abundance of animal food; elephants, rhinoceroses, hippopotami, requiring warmth, water, and luxuriant vegetation; are sufficient proofs that our climate was not only warm, but was, for the time, permanently so. The suggestion that warm summers and cold winters permitted the alternation of animals and plants of tropical and arctic types, will not meet the consideration that beasts, such as the hippopotamus, could neither endure the winter cold, nor migrate, with the seasons, across the whole breadth of Europe; and that the amount of vegetable food requisite for these gigantic pachydermata, and for the herds which formed the sustenance of the carnivora, could not grow each year as the winter glaciers disappeared.

These extreme changes of climate have naturally been much discussed amongst

geologists, and many widely different theories have been proposed as attempts to explain them. Many of these can be regarded only as guesses, which will not stand the test of exact reasoning; others again, although imperfect and not altogether satisfactory, must be accepted as having some foundation in fact. We propose to consider these theories in some detail, and more especially that which for the last eleven years has been associated with Mr. Croll's name.

The first of these theories to which we have to refer was, that different parts of space might have very different temperatures, and that in the onward march of the solar system the earth might successively arrive at spaces of excessive cold and especial heat. Now, beyond the mere fact that the passing through a cold part of space might lower the temperature of the earth, or passing through a hot part might raise it, it is quite clear that there can be no evidence in support of such a supposition. But, on purely physical grounds, the theory is untenable. The distinctive feature of the glacial period, as producing geological results, was not the cold, but the enormous quantity of snow, that is, of condensed vapor. When then there was snow, there must have been also vapor to condense; when there was much snow, there must have been much vapor, and much heat to make that vapor; and therefore, as Professor Tyndall has well shown, the glacial period, though a period of intense cold towards one or both of the poles, cannot have been a period of intense cold all over the earth. On the other hand, the warm arctic climate cannot have been caused by the general addition of some fifty or sixty degrees to the mean temperature; for such addition, affecting the intertropical as well as the polar regions, would have been fatal to animal and vegetable life. And again, as Mr. Croll has argued, since space, of itself, cannot be hot, any such hypothetical hot space must be in the neighborhood of some source of heat, some other sun, the attraction of which must necessarily have interfered with the orbital motion of the several members of the solar system.

A theory of somewhat similar nature is that the sun has been of very variable magnitude, or that its heating power has

been subject to excessive fluctuations. But the diminution of the sun's heating power, though of course it could produce a period of great cold, could not, as we have seen, give rise to a glacial period; and any great increase must, as before, have caused an alteration in the conditions of life, and have left behind it unmistakable proofs of its having occurred. We may therefore put these crude, unsupported, and unscientific fancies entirely out of the question, and pass on to the theory proposed by Sir Charles Lyell, and examined by him at considerable length in the later editions of his well-known works.

This would refer the changes of climate principally, if not altogether, to changes in the relative distribution of land and sea. Basing his argument on a remark of Humboldt's, that the climatic difference between North America and Europe was to be attributed to the American land reaching so much farther towards the pole, Sir Charles Lyell has maintained, with his usual clearness and copiousness of illustration, that an excess of land near the poles would give rise to a glacial condition; and that, contrariwise, an excess of land near the equator would occasion a sub-tropical climate all over the world. It is quite certain that changes in the distribution of land and sea must cause, and have caused, very different climatic conditions; it is also certain that, as a rule of the present time, land under the equator is hotter, land near the poles is colder, than the sea adjacent. But it is difficult to say how much of this difference is to be attributed to specially existing circumstances; and Humboldt's original idea of the cause of the rigor of the American climate, as compared with the European, cannot be accepted in this age of more exact geographical knowledge. It is beyond a doubt that the ocean currents and the winds which sweep over them are the cause of this present extreme difference, and it is logical to conclude that in any past age ocean currents must have contributed largely to the climatic conditions. But if at any time the intertropical area of the earth's surface was occupied almost entirely by land, no large current of intertropical water could have carried tropical warmth to temperate and arctic

regions; and referring merely to our own present experience, the absence of such a current would be at once severely felt. We would therefore agree with Mr. Croll in the argument he has put forward, that marked as might be the effect of a redistribution of land and sea, it is extremely doubtful whether the particular form of redistribution suggested by Sir Charles Lyell could have led to the results which he has described; and that though the probability of great changes in the relative shape and position of the land must be taken into account, we can scarcely admit that such changes were principally and primarily the causes of the very great changes of climate testified to by the geological record.

A difficulty almost still more conclusive against our accepting this theory in its entirety, is that there is no reason to believe that there has been any such complete redistribution of the areas of land and sea during recent geological periods. There is, on the contrary, strong reason to believe that the present form of the oceans and continents, in its principal features, stretches very far into the past; and it is quite certain that the last glacial period was, geologically speaking, very recent—so recent, in fact, that it touched on the arrival of man in Western Europe. Of the possible date of this we shall have to speak further on, but the evidence of man as absolutely contemporary with the reindeer in the south of France is very generally known.

The theory which would attribute the great changes of climate to great changes in the direction, or even in the being of ocean currents, has, during the last twenty years, been brought very prominently forward by many writers on physical geography; and very great weight is attached to it by Mr. Croll, whose investigations in connection with this branch of his subject have excited a good deal of scientific interest, and are now reproduced in a more connected form.

The simple fact of the existence of ocean currents, or what Captain Maury has aptly called 'rivers in the ocean,' is, of course, familiarly known; and of all the currents which traverse the ocean, none has been more frequently talked of and discussed than the Gulf Stream:

if mere discussion could have arrived at any settlement of the questions respecting it, they must have been settled long ago. The facts about which there is no dispute may be briefly stated thus:—

A rapid current of warm water issues through the narrow passage geographically known as the Straits of Bimini, between Florida and the westernmost of the Bahamas, and follows very closely the coast of North America as far as the banks of Newfoundland. This current, coming out of the Gulf of Mexico, is called the Gulf Stream.

The surface water of the North Atlantic, about the latitude of 40° , is, on the average, much warmer than that of other oceans in the same latitude; and this unusual warmth stretches away towards the north and east, conveyed by a slow motion of the water, and reaches as far as the North Cape of Norway and into the Spitzbergen or Barentz Sea.

To the north-west of this area of warm water with a north-easterly set, is an area where the water is cold and sets to the southward, whether on the east coast of Greenland, or out of Baffin's Bay, or down the coast of Labrador; and this cold southerly current, with a very contracted breadth, passes inside the Gulf Stream, and so washes the eastern coast of the United States.

Underneath the warm water, which on the north-east is flowing northwards, is a bed of icy cold water, the coldest of which lies in certain deep channels between the Faroe and Shetland Islands. And, lastly,

A great part of the warm water of the North Atlantic sets southward, down the coast of Portugal and Africa, into the tropics.

These are the very bare facts, concerning which there is no doubt; but everything beyond—every attempt to connect these facts together, to form a reasonable system out of them, or to offer any scientific explanation of them—has led to controversy and discussion, and very unscientific assertion.

The disputants may, however, be perhaps fairly considered as resolving themselves into two classes; one of which, maintaining that there is no break of continuity or flow between the water which issues through the Straits of Bimini and that warm water which spreads

over the middle latitudes of the North Atlantic, and passes to the north on the coast of Norway, or to the south on the coast of Africa, applies to the whole, collectively, the one title of Gulf Stream, and confers the name more distinctly on that northern part of it which passes into Barentz Sea; the other, holding that the Gulf Stream, as such, cannot be traced beyond the banks of Newfoundland, where its distinctively warm water has thinned out to the merest surface layer, and its velocity has died away, argues from familiar physical principles that the warm water of the tropical Atlantic and the cold water of the Arctic establish a circulation resembling, in its main points, that circulation which goes on through the pipes of an ordinary low-pressure hot-water warming apparatus; that, being such, the northerly flow of warm water along our coasts and the coast of Norway has no relationship to, and is quite independent of, the Gulf Stream; and that the name Gulf Stream applied to it is a geographical blunder and a physical misconception.

According to the first of these two classes the Gulf Stream is, in its origin, due to the trade winds, which drive the tropical surface water with considerable pressure into the Gulf of Mexico, from which it escapes through the Florida Narrows, as through the nozzle of a squirt, and is assisted by the prevailing south-westerly winds on the coast of the United States and by the strong west winds of the North Atlantic, known familiarly to seamen as 'the Roaring Forties.' These, it is argued, driving the water away from the American coast, call for a supply from behind. The so-called Gulf Stream is therefore strictly the continuous motion of the water that issues from the Florida channel, maintained, supported, and strengthened by the persistent westerly winds of the North Atlantic, and divided by the pressure of the European coast line, so that the northern part of it flows towards the north, the southern part towards the south; both of which branches are again still further supported by the winds of these regions, prevailing respectively from the south-west and north-west. That the water so driven under pressure into the Arctic should seek an escape as soon as, or wherever the pressure is with-

drawn, is a necessary correlation; and in this sense the southerly flow of water down each coast of Greenland is a complement of the northerly flow on the west coast of Norway. It is argued also that the water so pressed towards the Arctic is more than can possibly get into that confined basin, and that thus a considerable portion of it, having lost its heat in high latitudes, is, as it has been called, banked down, and escapes as a southerly underflow of cold water.

This systematic explanation of the Gulf Stream in connection with the general circulation of the currents of the North Atlantic, seems to us satisfactory, not only in its broad outline, but in its more special details; whilst any theory which seeks to account for the existing state of oceanic circulation by reference to differences of temperature and density, falls far short of the geographical facts, and necessarily ignores the southerly currents on the coast of Greenland, or that grand southerly flow of water on the coast of Portugal and Africa. It is, at any rate, difficult for any one who has studied the subject of ocean currents as a geographer, and has based his theories on geographical observation, to admit the effect claimed for what he knows as paltry and uncertain differences of specific gravity; although such may arise from differences of temperature, if, indeed, they are not more than counter-balanced by differences of salinity caused by differences of evaporation.

It is, of course, easy to produce any wished-for effect, as a lecture-room illustration; but no theory can be accepted which is based on such, unless it can be shown that the conditions are similar, if not identical. Now, very great stress has been laid by those who have advocated the temperature theory, on the illustration shown by Dr. Carpenter; that is to say, on the fact that by heating the water at one end of a long narrow tank, and by cooling that at the other, a vertical circulation can be established, a motion towards the cold end above, towards the warm end beneath. The conditions in such a tank and in the basin of the North Atlantic, of the small body of uniform water and the very large body of water of many diverse degrees of salinity, are too different to permit us to accept Dr. Carpenter's ex-

periment as even an illustration of a theory of oceanic circulation, which, when applied to the geographical area, does not conform to observation, and does not explain existing facts.

An examination into the arguments which Dr. Carpenter on the one side, Mr. Croll and many geographers on the other, have adduced in support of their several views, would lead us into the recesses of a controversy unsuitable for this Review. They will be found at length in the papers which Dr. Carpenter has contributed to the proceedings of the Royal Society or of the Royal Geographical Society, and in Mr. Croll's papers in the 'Philosophical Magazine,' or more recently in his latest work, 'Climate and Time,' as well as in other writings to which he refers. For our present purpose it will be quite sufficient to say that on the main point of causation we agree entirely with Mr. Croll. We believe that not only the Gulf Stream and its various branches and ramifications, but the ocean currents generally, are due solely to the system of prevailing winds; not—as Mr. Croll has well specified—to winds in any one particular locality, but to the connected system of winds, which act in relation to each other, and transmit their pressure to the surface of the sea through wide extents of ocean.

Now it might be considered that the theoretical explanation of ocean currents has little to do with the question of climatic change, and that the bare fact of their presence or absence is all that we are now concerned with. This is not the case; for it is clearly difficult, if not impossible, to say whether, in the distant past, warm or cold currents did or did not, might or might not, traverse certain seas, unless we have a correct understanding of the forces which call them into being and direct their course. Dr. Carpenter, for instance, has maintained that the effect of the Gulf Stream upon the climate of this country is imperceptible. On the other hand, an American writer, Mr. Silas Bent, came before the transatlantic public some few years ago with a proposal to cut, through the Isthmus of Panama, a passage sufficiently large to allow the water forced into the Gulf of Mexico to escape into the Pacific, with the avowed intention of ruining

this country as the commercial rival of the United States. Bent's proposal was so utterly absurd from an engineering point of view, that it escaped the notice due to it as a study in morality: but nevertheless, believing as we do that the Gulf Stream exercises a most direct and important influence on our climate, we believe that the submergence of Central America to such a depth as to permit the tropical waters driven by the trade winds to pass through into the Pacific, would produce a disastrous effect on the climate of North-western Europe; that glaciers might again flow down the valleys of Scotland, of Westmoreland, or of Wales; and that our harbors might be closed each winter with impenetrable ice: whilst Dr. Carpenter, believing that the warm current which passes to the north is quite independent of the Gulf Stream, and is the necessary circulation of tropical and arctic water at different temperatures, believes also that such a submergence of Central America would in no way interrupt this circulation, and would be to us a matter of little or no consequence.

Similarly, he believes that the circulation would go on irrespective of other changes in the formation of the land, and that therefore oceanic currents cannot play any important part in the history or theory of the climatic changes of the past. It is on this account that Mr. Croll has devoted a very considerable portion of his work to the examination of the different theories of ocean currents, arriving, as we have already said, at the conclusion that the circulation supposed to be due to differences of temperature does not exist—we would rather say, is insensible—and that the currents are due solely and entirely to the prevailing winds.

Believing then in the extreme importance of ocean currents as agents of climatic change, Mr. Croll has attempted to calculate their actual effect under present existing conditions. The labor of this calculation must have been very great, and we are by no means sure that its value is commensurate; for, with all possible care, the data are so very uncertain, that the results cannot be depended on as even approximately correct. The utmost we can allow is that they dimly shadow out the nature of the effect, and

it is only with this comprehensive limitation that we accept them.

Very different estimates have been formed of the quantity of water which passes through the Narrows of Bimini. Anxious to avoid any charge of exaggeration, Mr. Croll has accepted the lowest: he assumes that 459 cubic miles of water pass through every day. He further assumes that the mean temperature of this mass of water as it passes through the Straits is 65° F., and that the mean temperature of the same water as it returns south is 40° F. These estimates are purely hypothetical. Certainly very much of the water in the straits has a temperature far higher than 65° , and much of that which returns has a temperature far lower than 40° . As before, Mr. Croll purposely understates his case, and concludes from these data that the water projected each day into the northern part of the North Atlantic loses there twenty-five degrees of its temperature; that is to say, each cubic foot loses upwards of 1,500 units of heat,* and the total loss in these units is somewhat more than one hundred thousand billions.

Such a number is, of course, only useful for purposes of arithmetic, as affording a means of comparison with other numbers equally beyond our powers of conception. It enables us to compare the quantity of heat so thrown off by the Gulf Stream with that received directly from the sun. It shows us that, according to the calculations and experiments of Herschel, Fouillet, and Meech, the quantity of heat so carried into our temperate regions by the Gulf Stream in one year is equal to that received directly from the sun over an area equal to the fourth part of the North Atlantic north of the Straits of Florida. The heat thrown off by the Gulf Stream in temperate latitudes is therefore equal to one-fourth of that supplied directly by the sun, and constitutes one-fifth of the whole heat of this vast area of the Atlantic.

Having arrived at this relative value of the heating power of the Gulf Stream,

* A unit of heat is the quantity of heat necessary to raise the temperature of one pound of water by one degree Fahrenheit.

he next endeavors to form some idea of its absolute value by calculating the whole effect of the sun. The method which he follows is undoubtedly correct, though the results he obtains are so startling, that we cannot be surprised that both method and results have been controverted and denied.

The temperature of space is, according to Herschel and Pouillet, about 239 degrees below the zero of Fahrenheit, and to this, if the sun were extinguished, they believe the temperature of the earth would rapidly sink. The mean annual temperature of the North Atlantic, north of the tropic, may be taken as 56° F.; the whole effect of the sun on the water of the North Atlantic is, therefore, 56 degrees more than 239, or 295 degrees: but we have just seen that one-fifth of this is imported by the Gulf Stream: it follows, therefore, that the stoppage of the Gulf Stream would withdraw 59 degrees, and reduce the mean temperature of the North Atlantic below zero.

Now, although we cannot attach any idea of exactness to this calculation of the effect of the Gulf Stream, we do believe that it shows more correctly than any previous attempt the enormous influence which that current has on our climate. It shows how important must be the general action of ocean currents, and leads us directly to the consideration of the great currents in other parts of the world. None of these have been examined with that care which has been bestowed on the Gulf Stream, and the conditions of their origin render it impossible to form even the roughest estimate of their volume. The Japan current in the North Pacific corresponds in many respects to the Gulf Stream, but there are no observations which enable us to say whether its volume and mean temperature are greater than those of its counterpart, or are less. It is nowhere confined in a narrow channel, where its dimensions can be, however rudely, measured; its surface flow is intermittent, and it has not yet been discovered what becomes of it during the month of February, when it disappears from the coast of Japan. The general impression amongst geographers is that it is altogether less than the Gulf Stream, and, compared with the larger area of the Pacific, there is little reason to doubt that it is so:

still, its climatic effect is unquestionably very great.

The currents which, in the southern hemisphere, correspond to these, are small, in both the Atlantic and Pacific, and their volume and temperature insignificant in comparison. The only current of any note which flows from the tropics into the Southern Ocean is that which escapes from the Indian Ocean along the coast of Natal, and its waters are almost entirely spread out and carried away to the eastward by the prevailing drift: being thus dispersed, it has little direct influence on the climate of any of the southern lands.

Small, however, as the heat-bearing currents of the southern hemisphere are in comparison with those of the northern, it is quite clear, by reference to the calculations which have been made as to the effect of the Gulf Stream, that they must exercise an important influence on the southern climate, and that if they were altogether withdrawn, the climate of the higher latitudes of the southern hemisphere would be very much worse than it even now is. If, for instance, the whole of the tropical drift to the southward of the line was to be pressed to the northward, the climate of the southern hemisphere would become much more severe; whilst at the same time the volumes of both the Gulf Stream and Japan current would be much increased, and the northern hemisphere would be made much warmer. And conversely, if all the warm currents were driven to the south, then the northern hemisphere would have a glacial climate, and the southern a mild and warm one.

Now, the median line between the northern and southern trade winds, which is also the median line of the equatorial drift, is undoubtedly coincident, or nearly so, with the line of greatest heat. When, therefore, one hemisphere is chilled and the other warmed, so that this line of greatest heat (thermal equator) passes far into the warmer hemisphere, the middle line of the equatorial drift, and the main body of the equatorial drift with it, passes also into the warmer hemisphere; and the volume of the warm currents of the warm hemisphere is increased, and that necessarily at the expense of the cold hemisphere. There is thus a tendency for the warm

hemisphere to increase its warmth, and for the cold one to become more cold.

Mr. Croll explains this tendency by reference to a supposed increase of the strength of the trade winds in the colder hemisphere; but this seems at least doubtful. We would agree with him as to the effect produced, but would attribute it, rather, to the movement of the thermal equator; and we may support our objection by the evidence of the existing condition in the Pacific Ocean. Over none of the intertropical seas are the trade winds so irregular and uncertain as over the South Pacific; but the thermal equator is some 3° or 4° to the north of the line, and undoubtedly a great part of the equatorial drift passes into the northern hemisphere.

But in connection with this, there is one important point on which Mr. Croll has scarcely laid sufficient stress; and that is the effect, on this interchange of currents, of even comparatively slight alterations in the form of the land. We have already referred to the possible effect of an alteration so slight as the submergence of Central America: the submergence of the low land of South America would produce a much greater. Notwithstanding the present position of the mean thermal equator some 5° to the north of the line, it is quite evident that the main cause of the intrusion of so much of the equatorial drift into the North Atlantic is rather the position of Cape St. Roque and the general lay of the coast of South America. Cape St. Roque is in latitude $5^{\circ} 10' S.$, and intercepts a considerable part of the north-westerly drift of the South Atlantic. It is quite clear that, when once caught, this has no escape to the southward, but must go north towards the Caribbean Sea. Similarly, all the water that, during a great part of the year, is pressed up against this coast line by the north-east trades, is also compelled to go towards the north-west. But if this coast line did not exist, if the plains of the Orinoco, the Amazon, and the Paraguay were at the bottom of the sea,—and it is certain they were there at no very distant geological period,—this restraint on the equatorial drift would no longer exist, and the greater portion of that heated water which now flows into the Gulf of Mexico would, beyond doubt, be pressed

to the south, warming the southern hemisphere at the expense of the northern.

In the same way a slightly different arrangement of the islands in the west of the Pacific, the line of which now slopes away towards the north-west, and forces a great part of the equatorial drift to the north as a supply to the Japan current, would either divert it to the south, or would permit it to pass through into the Indian Ocean, and so increase in volume and in heating power the current of the coast of Natal. The effect of these changes cannot, of course, be calculated: they might vary in intensity; they might be whole or partial. All that we can say is, that having attempted to calculate the effect of the Gulf Stream, and, whilst fully acknowledging the roughness and imperfection of that calculation, having convinced ourselves of the enormous climatic influence of that current, we are able to form a shadowy idea of the possible effect of other currents which might, under different conditions, flow in very different directions; and we arrive necessarily at the conclusion that the ocean currents are a most important cause of the conditions of climate now existing, and, changing in magnitude and direction obedient to changes in the coast line, in the thermal equator, and in the prevailing winds, must have been so ever since the world began.

But Mr. Croll, admitting the very great influence of ocean currents on climatic conditions, and arguing most ably on their causes and changes, has considered them throughout as secondary to cosmical changes, changes, that is, in the earth's orbit and position at different seasons relative to the sun. His theory on this point is entirely his own; and though, during the ten or twelve years which have passed since he first broached it in the 'Philosophical Magazine,' it has been much discussed, it has continually gathered strength, and is now very generally accepted as an extremely probable solution of the many difficulties involved in the question of climatic change.

From the days of our childhood, we, dwelling in the northern hemisphere, have been familiar with what then seemed the startling fact that the earth is nearer the sun in winter than in summer; and that winter and summer depend not so

much on the lesser or greater distance from the sun, but on the degree of the divergence of the sun's rays from the perpendicular. We learnt, in fact, the meaning of the terms 'tropics,' 'arctic,' and 'antarctic;' and, in all probability, learnt also many climatic rules which we have been now proving to be erroneous. We therefore refer to this early instruction in the use of the globes only to remind our readers that the northern winter now occurs when the earth is nearest the sun, the southern winter when the earth is farthest from the sun. The difference between the two distances, the nearest and the farthest, is at present about one-thirtieth of the mean distance, or three million miles; but it is subject to continual though exceedingly slow change, and may increase till it is rather more than fourteen millions of miles, or between one-sixth and one-seventh of the mean distance. At the present time, the hemisphere which is nearest the sun in winter has a winter eight days shorter than its summer; at the time of the greatest difference just spoken of, the winter would be thirty-six days shorter. Now it might well be supposed that a difference of even eight days between the length of summer and winter, and much more a difference of thirty-six days, would make a very great difference between the warmth in summer, or the cold in winter, of the two hemispheres. It might well be supposed that the hemisphere whose summer was eight days longer than the other would be the warmer in that proportion, and still more when the summer was thirty-six days longer.

Accordingly, no sooner was it shown from geological evidence that the earth had been subject to very great changes of climate, than the idea was started that these changes were due to corresponding changes in the shape, or, mathematically speaking, the eccentricity* of the earth's orbit; and to there having been, at some former time, this great difference in the length of summer and winter. But it was shown by physical reasoning from

observed facts—we may say that it was satisfactorily shown—that notwithstanding this great difference, and whatever the difference between the length of summer and winter, the quantity of heat received from the sun in the course of the year by each hemisphere was exactly and always the same; from which fact it was argued that any climatic difference in the two hemispheres, either from each other or from a fixed mean, could not be due in any way to such a change in the orbit of the earth.

Sir John Herschel, indeed, as far back as 1830, was inclined to believe that these differences might give rise to remarkable changes of climate, but he would appear to have been dissatisfied with the evidence to that effect; and in the early editions of his 'Outlines of Astronomy' he taught that since the quantity of solar heat received by the two hemispheres was the same, the effect which might arise from the difference of distance and of the length of the seasons would be counterbalanced. In the fourth edition, published in 1858, he considerably modified this opinion, and wrote that, on the supposition of a very great eccentricity of the earth's orbit, other things remaining the same, in the northern hemisphere 'we should have a short but very mild winter, with a long but very cool summer; while the southern hemisphere would be inconvenienced, and might be rendered uninhabitable, by the fierce extremes caused by concentrating half the annual supply of heat into a summer of very short duration, and spreading the other half over a long and dreary winter, sharpened to an intolerable intensity of frost, when at its climax, by the much greater remoteness of the sun.'

This, then, may be considered the most advanced view of the effect of the changing eccentricity of the earth's orbit previous to Mr. Croll taking up the subject in 1864. Accepting Sir John Herschel's views of the perpetual spring climate of the hemisphere whose midwinter occurs when the earth is nearest the sun (*in perihelion*), Mr. Croll dissents altogether from the opinion that the other hemisphere will have a climate of violent contrasts; an intensely hot, almost unendurable summer, contrasted with a winter as intensely cold. His argument

* An ellipse is described on paper by drawing a pencil along in the bight of a string, fastened at the two ends to pins firmly driven in. The distance between these two pins as compared with the length of the string is the eccentricity of the ellipse.

amounts to this: that during the long cold winter of a period of maximum eccentricity, all the precipitation over that hemisphere would be in the form of snow; that this snow would lie unmelted, and would cover the surface of the ground at the commencement of the short summer; that the summer sun shining on this snow-clad surface would not warm it, but that a great portion of the heat rays would be reflected back into space; and of those rays which were not so reflected, the effect would be to convert some of the snow into water or vapor; that the vapor so formed, being partially condensed by the neighborhood of vast masses of snow, would hang in the air as cloud and fog, and in great measure shut off the heat of the sun from the surface of the earth, or rather of the snow which covered it.

He considers that we have a feeble analogy to this in the existing state of things in the southern hemisphere, in which, according to Sir James Ross, at the comparatively low latitude of 59° , in longitude 171° E., snow was falling on the longest day, and during the month of February (the month corresponding to August in the northern hemisphere) there were only three days free from snow showers. More recently Captain Nares has given evidence to the same effect. He says: 'Whilst in the neighborhood of the ice, between the 13th and 25th February, the temperature of the air ranged between 34.8° and 21.5° F., the mean being 31.5° ; a slightly colder climate in an average latitude of 64° S. than is found in the month of August in the Arctic seas, in latitude 74° N.'*

In the same strain Mr. Croll argues that the cold of Greenland and other arctic countries continues during the summer, not from the absence of heat, but because the snow-covering prevents the earth receiving it. During the early summer fogs are extremely frequent, shutting off a great part of the sun's rays, and those which reach the earth do not warm the surface. He adduces on this point the evidence of Captain Scoresby, that the general obscurity of the atmosphere arising

from fogs or clouds is such that the sun is frequently invisible during several successive days; and snow is so common in the arctic regions, that it may be boldly stated that, in nine days out of ten during the months of April, May, and June, more or less falls. Other arctic voyagers have given the same testimony. We will only add that from the last voyage of which a report has been published, the cruise of the *Tigress* in 1873. 'At 10 o'clock,' writes Lieutenant-Commander White, 'on the morning of Sunday, the 10th of August, the ship was brought to anchor in the harbor of Upernivik. A dense snow-storm lasted the entire day, making the country look all the more dreary for its new, fresh covering. From this time forward, snow-storms, storms of sleet, and a sort of frozen fog, were not unfrequent.'*

This snow, this fog is, according to Mr. Croll, due entirely to the snow-covering of the surface; for the quantity of heat directly incident from the sun, during the long summer days, is very great, greater even than at the equator. Even as to momentary effect, a thermometer exposed to the direct radiation of the sun will stand at 100° F. or upwards, although the temperature of the surrounding air is below freezing point; and it is well known that, whilst snow and ice are lying in the immediate neighborhood, the pitch of a ship's seams will melt, or the black paint blister in the sun.

Mr. Croll's argument, then, amounts to this: that the present summers of Greenland and the Arctic are cold by reason of snow. 'If,' he says, 'by some means or other we could remove the snow and ice from the arctic regions, they would then enjoy a temperate, if not a hot, summer. In Greenland snow falls even in the very middle of summer, more or less, nine days out of ten; but remove the snow from the northern hemisphere, and a snow-shower in Greenland during summer would be as great a rarity as it would be on the plains of India.'

If we agree with Mr. Croll in this view of existing conditions, it follows that if, in any locality, the snow of winter does not melt during the summer, the climate

* Reports, etc., of H.M.S. *Challenger*. No. 2, p. 20.

* Proceedings of the United States Naval Institute, vol. 1. p. 41. 1875.

of the locality is deteriorated; a continually increasing quantity of snow will be left each summer, and by degrees the whole face of the country will be covered. Now the eccentricity of the earth's orbit changes very slowly, and any climatic change resulting from it alone would come on also very slowly. The accumulation of snow might go on for thousands and thousands of years, and might, it will be evident, reach almost any conceivable extent.

But the climates of the two hemispheres during a period of maximum eccentricity would be extremely different, and, so to say, complementary. That hemisphere whose winters occurred at or near the time of the earth being in perihelion would have a mild and equable climate; winters warm, with little or no snow, by reason of the nearness of the sun; summers temperate, by reason of the distance, but not cold, because there would be no snow-covering to melt away. The precipitation might be great, but if so, it would be as rain; and the condensation of vapor into rain sets free vast stores of latent heat. A climate of extreme rain is, as far as the thermometer is concerned, necessarily mild; and the vegetation of a country depends rather on the minimum temperature than on the mean. We are all familiar with the damage often done by a frosty night in May; and the effect of three such nights on the vineyards of the south of France was brought tangibly home to many of us, some four years ago, by a considerable advance in the market price of Bordeaux wines. It is thus an equable climate, in which such minima are unknown, that is most favorable to vegetation; and even now, the vegetation under the most thoroughly wretched climate on the whole earth, in *Tierra del Fuego*, is almost tropical in many of its characteristics. But whilst one hemisphere would have a climate thus favorable to vegetation, equable and warm, the other would be subjected to the extreme rigor of cold; the snow-covering would reach far into the temperate zone, and the whole hemisphere would be chilled.

In so considering the changes of climate, there is then another astronomical condition no less important than the eccentricity of the orbit, and that is the

position of the earth in its orbit during the summer and winter halves of the year. At the present time the line which joins the positions of the earth at midsummer and midwinter is very nearly, though not quite, coincident with the greatest diameter of the earth's orbit, and midsummer and midwinter fall very nearly at the time at which the earth is respectively at its greatest and least distance from the sun—in astronomical language, when the earth is in aphelion and perihelion. Now this line continually changes its position, by virtue of a movement due, for the most part, to what is known as 'the precession of the equinoxes.' It turns slowly round the sun, and makes a complete circuit in rather less than twenty-one thousand years; that is to say, in about ten thousand years the position of the earth relative to the sun at midsummer and midwinter will be exactly the opposite of what it is now. Our midsummer will be when the earth is in perihelion, our midwinter when the earth is in aphelion; our winter will be about eight days longer than our summer, and the difference arising from this cause, such as it is, will be in favor of the southern hemisphere, as it now is in favor of the northern. But the same continual movement, the same precession of the equinoxes, goes on independently of any change in the eccentricity of the earth's orbit; and it may thus have happened that, during a period of maximum or very great eccentricity, the earth might be in both these positions, and, at intervals of some ten thousand years, both northern and southern hemispheres each be subjected to an extreme state of glaciation and to the very opposite conditions of a sub-tropical climate.

Amongst the many objections which have been made to this theory, there was one pointed out by Sir Charles Lyell, which cannot be overlooked. It amounts to this: that in this, as in other meteorological phenomena, the maximum effect would not be coincident with, but would follow at some distance, the maximum cause. The greatest accumulation of snow on the hemisphere supposed to be glaciated would not be when mid-winter fell when the earth was in aphelion, but, rather, towards the end of the period during which the winters were longer than the summer, that is, as the earth at

midwinter approached the point of quadrature. Now, in the gradual change of the earth's position, the accumulation of snow must take as long to disappear as to collect; and if the accumulation went on through the whole period during which the winter was longer than the summer, the removal of this accumulation would last through the whole complementary period, and begin again at the end of it. In this way each hemisphere would be subjected to continual, never-ending glaciation, instead of to an alternation of cold and warm periods.

A reference to the existing condition of the southern hemisphere permits us, to some extent, to explain away this difficulty. The winter of the southern hemisphere is now about eight days longer than the summer, but the accumulation of snow has scarcely made any approach towards that of the glacial period. There is no reason to believe that it increases at all; but if it does, it is so slowly that a hundred years has not made it evident. We are therefore within our right in assuming that, under a condition of extreme eccentricity, the accumulation of snow would not approach the zone now called temperate until the excess of winter was considerably more than eight days, and would attain its maximum at the corresponding position of the solstice on the other side of aphelion. This snowy covering might thus well have disappeared before the position of midwinter in perihelion was reached, and the maximum effect of the sun would be some time after that position was passed. There is no doubt that in this there is a great difficulty; but as Mr. Croll has not referred to it, he is not responsible for the imperfect explanation which we have offered.

From his more especial point of view, Mr. Darwin has considered that the alternation of cold and warm periods, as described, will explain certain problems in the distribution of plants, which seem inexplicable on any theory of simultaneous glaciation at both poles. There are some species of plants common to the temperate zones of both hemispheres which are not found in the tropics, except on elevated mountains. How did they get there? How did they cross the equator? According to the theory we have been discussing, during a peri-

od of glaciation in one hemisphere, the line of greatest heat would reach far into the other, and the geographical equator might well be virtually included in the temperate zone. The plants of the colder hemisphere, flying from the increasing cold, or, rather, attracted by more favorable conditions nearer the equator, would gradually spread in that direction, and during the glacial period would flourish in the geographical tropics. As the thermal equator began again to approach the geographical, these would be driven into the higher lands, and would stay there till the hot zone had passed by into the opposite hemisphere: they would then descend, and, occupying the lowlands, would spread as far as possible towards the new ice-cap. Representatives of the species would thus be on both sides of the equator, and would necessarily retire to the temperate zones beyond the tropics, as the climate again changed. The probable solution of this botanical problem lends a strong support to the view which Mr. Croll has taken of the very different and alternating climate of the two hemispheres during the cold periods.

A peculiarly tempting feature of this theory is that it offers an explanation of the many puzzling changes of sea level, traces of which are still manifest on our own and neighboring coasts. That many, and the most important, of these changes have been brought about by the action of internal forces, which we do not and probably never shall understand, is accepted by all geologists; but, in Mr. Croll's opinion, it is unnecessary to appeal to these forces as an explanation of all. He believes that many of them are due, not to a raising or lowering of the land, but to a lowering or raising of the sea; and that this raising or lowering is due to the attraction of the mass of ice accumulated near one or the other pole. His reasoning on this point is a necessary corollary of the theory on which he founds it, the alternation of the glacial period in the two hemispheres. Assuming this, he argues that an enormous mass of ice at or near one pole must alter, to some extent, the position of the earth's centre of gravity; that an excess of sea will therefore be drawn over towards the glaciated hemisphere, causing in it an apparent sinking

of the land, whilst in the other hemisphere the land will appear to rise. He believes, then, that the 'raised beaches,' distinctly marked at many points of our coast, are the beaches so made at a higher level during the last period of glaciation; and that, further back, the junction of England with the continent was due to a withdrawal of the water from the North Sea, rather than to a real raising of the sea-bed.

That the accumulation of snow at one pole would tend to produce some such effect is mathematically certain; but the extent to which it would actually produce it is doubtful, and would depend entirely on the extent of the displacement of the centre of gravity, and, therefore, on the thickness of the ice-cap over the glaciated pole. Mr. Croll believes this to have been, in some instances, very great: he believes that, even now, it is very great at the South Pole; but the measure of this belief is founded on assumptions that will scarcely be generally accepted. He assumes, for instance, that the south polar region is occupied by a continent, which reaches in every direction to an average distance of twenty degrees from the pole, or rather more; and that this continent is covered with an ice-cap of a thickness sufficient to permit it to discharge icebergs by the natural motion of the ice. Now, he argues from experiment that ice will not move over a slope of less than one degree, and that this slope, carried from the coastline to the centre of the hypothetical continent, gives a thickness of twenty-four miles.

That icebergs of enormous size are discharged from the south polar region is well known. Mr. Croll has given the estimated dimensions of many that have been seen, from which it appears that a thickness of more than a mile is not uncommon; but the evidence of a continent three thousand miles across, or of an ice-cap twenty-four miles thick, is scarcely satisfactory. Mr. Croll is indeed willing to accept one-fourth of this thickness; but clearly, if the bases of his argument are sound, twenty-four miles, and not six, are necessary to meet the requirements of the known fact that huge icebergs are discharged. If he accepts a possible thickness of six miles, it is that he admits that ice may move on

a much less slope than has been experimentally proved, and the very groundwork of his argument crumbles away; for there is as much reason to suppose that ice may move on a slope of one-hundredth part, as on one of one-fourth part of a degree, and, for aught we know to the contrary, it may be merely a question of time.

We thus find ourselves without any trustworthy data on which to base any calculations regarding the displacement of the earth's centre of gravity during the periods of maximum glaciation; and though we would freely admit the possibility of a displacement that would lay bare the North Sea, and carry our coast westward to the one-hundred fathom line, or that would, on the contrary, lay under water a great part of the lowlands of England, Scotland, and the adjacent countries, we are unable to admit it as a certainty, and are the more compelled to doubt, as a familiar proverb warns us ever to mistrust what seems probable. We think it is extremely likely; we know that it is extremely tempting; but it is not proved.

Another feature of Mr. Croll's theory, which is still more tempting, and which seems based on more certain evidence, is the possibility, the long wished-for possibility, which it promises of a really scientific estimate of geological time; for all attempts that have been made on purely geological bases have proved, on investigation, unsound and altogether unsatisfactory. Of these attempts, the most common has been by reference to the thickness of different strata, and an estimate of the time requisite for their deposition. But the calculations so made have been wild in the extreme, the general tendency of uniformitarians having been to run away into appalling statements of hundreds and thousands of millions of years. Mr. Croll considers that this propensity to exaggerate is due partly to the inability of the human mind to form any real conception of the meaning of very high numbers. A unit, followed by six, or twelve, or eighteen ciphers, is an arithmetical expression, and nothing more.

This incapability, however, whilst it has perhaps permitted the acceptance of the exaggerated estimates, is not responsible for their being. This has followed

from the method which has been adopted of referring different formations to a mean rate of deposit, instead of to an exceptional one; of virtually supposing, in fact, that earthy matter washed into the sea is uniformly spread out over the whole bed of the ocean. This, of course, is not the case: probably no one for a moment would think of asserting it, though many calculations have been made after tacitly assuming it. Deposits washed into the sea cannot, as a rule, reach beyond a distance of a hundred miles, and spread over even that very partially. The Mississippi, for instance, brings down from the sea each year upwards of seven thousand millions of cubic feet of solid matter; but as this is almost all laid down in the northern part of the Gulf of Mexico, clearly in a future age the thickness of this stratum can form no measure of time if compared with the formation of river deposits under very different conditions.

Similarly, although from the quantity of solid matter carried down each year by the principal rivers of the globe, we can calculate the mean rate of denudation now going on in their respective basins, it is utterly impossible to say what is the rate of denudation in any specified district. Professor Geikie (Archibald) has computed that the sediment brought down by the Mississippi in 6,000 years, the Ganges, in 2,358, or the Po in 729 years, is equivalent to a mean denudation, throughout their respective basins, of one foot; but no geologist would maintain that the demonstrated removal of one foot, at any given spot, necessarily corresponded to the computed number of years, or, in fact, bore any relation to it. Attempts to fix the chronology of the past by any such calculations have always appeared to us utterly futile, a waste of much labor and ingenuity.

Mr. Croll, for the first time in geological science, has proposed to calculate the past epochs on an astronomical basis. From a formula given by Leverrier, he has computed the eccentricity of the earth's orbit at intervals of fifty thousand years, or, in special cases, at intervals of ten thousand years, for a period extending, in all, over four millions of years. This calculation is liable to the objection that the formula is proposed

by Leverrier only with reference to a comparatively short period—a hundred thousand years—backwards or forwards, and its application to a period so extended as three million years is quite uncertain. It is beyond the power, even of astronomers, to say positively what was the condition of the solar system three million years ago, or what it will be one million years hence. Mr. Croll's calculation is, therefore, based on the doubtful hypothesis that the solar system through all ages has been and will be subject to the same forces and disturbances as at present; and on this hypothesis he arrives at the conclusion that periods of extreme eccentricity have happened one, two, and three hundred thousand years ago; again between seven and nine hundred thousand years ago; and at other epochs still more remote, the greatest within the limits of his calculations occurring two and a half million years ago.

Comparing these figures with the geological record, he concludes that the last glacial period, whose signs are those which most clearly remain, coincided with and extended over the two latest of these epochs, being at its astronomical maximum two, and again one hundred thousand years ago, and continuing as distinctly a cold period to between seventy and eighty thousand years ago. Within this limit the computation may be accepted as fairly trustworthy. The more remote determinations, reaching back to a million or three million years ago, astronomical epochs which Mr. Croll wishes to identify with the periods of the middle and early divisions of the Tertiary age (Miocene and Eocene), must be considered as much more doubtful; but, failing any more exact knowledge, they may be accepted as vaguely measuring the lapse of time since the beginning of the present forms of life.

Sir William Thomson's calculations, that the age of the world cannot exceed one hundred millions of years, have at least a mathematical and physical basis. Professor Ramsay, perhaps the first of living geologists, has expressed his opinion that, as compared with the vast extent of geological time, the oldest formations are things of yesterday. The collocation of these two decided opinions of men, of all others the most competent

to form opinions, serves at least to bridle the imagination, which has been apt to run riot in a labyrinth of unmeaning numerical expressions.

The reference of the last glacial period to an astronomical epoch eighty thousand years ago, gives a plausible estimate of the antiquity of man in this part of the world. From a long examination of the older stone deposits, Mr. Geikie has shown that palæolithic man was in this country contemporaneous with the last tropical mammalia, and that beyond a doubt these were antecedent to the last glacial period. All the geological evidence is to the effect that since then our climate has been continually improving: there has been no intervening warm period. It has long been admitted that between palæolithic and neolithic man there was a distinct gap: the one did not merge by gradual improvement into the other. Mr. Geikie would conclude that the cause of this gap was the burying the greater part of Scotland and England under ice, and the small remainder under water. He considers, then, that the remains of the tropical mammals and of palæolithic man are to be referred to the last warm period, that is to say, about ninety or a hundred thousand years ago. These, as far as England was concerned, were exterminated or driven out by the increasing cold; the man maintaining his ground long enough to mingle his bones with those of the arctic animals which took possession of the country. After the lapse of many ages, when the ice-cap had partially disappeared, other men took his place—men of different form, habits, manners—neolithic men. These were contemporary with many of the arctic mammals not yet withdrawn to the north; amongst others, the musk ox and reindeer. It is of course impos-

sible to fix the date of this new intrusion: the amelioration of our climate was very gradual, and both musk ox and reindeer continued for a long time to roam as far south as the Pyrenees. Neolithic man certainly lived with them and on them, and nothing in the evidence would point to a later date for the post-glacial colonization of this country than about sixty thousand years ago.

Mr. Croll's theory is so pretty, and the results are so fascinating, that it is difficult to avoid being carried away by a feeling of æsthetic admiration unsuited to scientific inquiry. It costs us an effort, as we conclude, to call to mind any of the objections against it. Of these, we think the one which we have mentioned as raised by Sir Charles Lyell has very great weight; but of even greater weight do we consider the objection that the ocean currents—having the enormous climatic influence which Mr. Croll has proved them to have—may increase, but may, on the other hand, act contrary to the effect of the orbit's eccentricity. Mr. Croll believes that they must necessarily increase it; he believes that the greater part of the inter-tropical drift must necessarily pass into the warm hemisphere. So far as depends on the position of the thermal equator, we fully agree with him, but we cannot, with him, ignore the effect of the trend of the coast line, which must act independently of cosmical conditions; and whatever effect we may allow to changes in the eccentricity of our earth's orbit, we believe that the relative severity or mildness of the cold and warm periods must have been measured out by the coast line of Central or South America, of New Guinea, and the adjacent islands, and have been determined by the volume and temperature of the Japan current and of the Gulf Stream.—*British Quarterly Review*.

ON TURKISH WAYS AND TURKISH WOMEN.

PART II.

IN trying to draw a comparison between Eastern and Western social customs, the first difference which strikes us is as to the court. Royal and noble ladies have played so important a part in our own national life that we can hardly

conceive of a court which is not adorned by the presence of cultivated women. Where men only congregate round an Eastern monarch there can be nothing but frigid etiquette and a want of grace and brightness. To gain official importance is the one thought, the one aim of those about the sovereign; this leads

to a cringing servility in the mode of saluting and in the whole demeanor, and to minute distinctions in etiquette most strictly prescribed for the observance of each grade of the Sultan's courtiers. I witnessed something of this at what was, I believe (until it was lately revived by the present Sultan, Abdul Hamid), the last Bi-aât, open-air levee, or *baise-main*, held according to ancient custom. The *fête* to which I refer took place in honor of the Baïram festival at the old Seraglio Palace, on the 27th of January, 1868. The ceremony was an imposing though somewhat monotonous one, but so picturesque were the surroundings that we scarcely wearied of the long time of waiting which had to be endured in the raw morning air before the royal cortège arrived from the mosque, whither the Sultan had gone in state at daybreak. Under the shade of dark cypress-trees, on either side the avenue, stood lines of infantry regiments in new uniforms with the brightest of scarlet fezzes. Several privileged Europeans had obtained admission within the great gates of the outer enclosure, which were, for the rest, strictly guarded. These persons, gaily dressed, strayed on the green sward under the trees, or took up the most advantageous position for witnessing what was to follow. Chairs had been placed for our party on some raised stone-work surrounding an old oak, near the principal gateway, beneath the high over-hanging portico of which the Sultan, seated on his jewelled throne or chair of state, was to receive, in full gaze of the assembled Faithful and of the members of the different diplomatic bodies, the salutations of the various officers of state and of the head Imâms, or priests. Close to our left was the tent for the European Ambassadors, and amongst the soldiers stood the then little Prince Youssouff Izzeddin, in military uniform. During the hour of waiting the soldiers kept no strict discipline, but stood about in knots, jesting and laughing amongst themselves. Presently the music struck up, and the long procession of Pachas and Effendis, in uniforms covered with glittering embroidery, began to advance up the avenue. Each Pacha was surrounded by a circle of his own attendants on foot, in varied dresses, whilst he himself was on horseback. The Pachas

in official employ preceded the Sultan; the Princes of the Imperial family rode immediately in front of him, in the most brilliant uniforms of all, being resplendent with masses of gold embroidery. Abdul Aziz, plainly dressed in a dark blue surtout, wearing only the star of the order of the Osmanieh, was mounted on a magnificent silver-grey charger, caparisoned with jewelled silver harness and trappings. The Sultan's bearing was grave and sedate, not to say morose. His habit of keeping his chin depressed and his gaze immovably fixed in front of him had a chilling effect. Without turning to right or left, he passed amidst the respectful silence of the crowd, straight under the gateway into the inner court, and there dismounting, remained invisible to the crowd whilst hasty preparations were made for his return. Meanwhile the soldiers were keeping back a crowd of rabble that had passed in on the entrance of the troops; the Pachas and high functionaries were taking up their places according to their respective ranks within the line of troops, and the Imâms were forming as a body by themselves in a part of the building opposite to us, ready to defile when their turn should come. Arrangements were now made marking distinctions to be observed in the way of approaching the royal presence. A long strip of crimson carpet was laid down in the avenue, defining the line along which the lesser dignitaries were to advance in front of the throne, whilst shorter strips were so placed as to make the space immediately in front of it resemble the stripes on a huge Union Jack. A carpet of cloth of gold was spread beneath the portico, and presently the throne or chair of state was carried out and placed on this. It appeared to me to be in the shape of a long, square-backed sofa, and to be of gold ornamented with precious stones. This chair of state was carefully covered with gold gauze until the Sultan approached, which he did amidst a flourish of trumpets, looking very glum and greatly bored. He took his seat as though that act indicated his right to sit as a sovereign whilst others must stand in his presence; but the moment the Grand Vizier, Fuad Pacha, advanced to offer his homage, the Sultan rose, and remained standing whilst the other great

functionaries salaamed and passed behind the throne. Aali Pacha, Kiritli Mustapha Pacha (of Crete), Omar Pacha, Kiamil Pacha, Ruchdi Mehemet Pacha, &c., passed, and when the *Beylikjee-bache*, or Lord Chief Justice, had saluted, his Majesty sat down, as if the worst of the ceremony was over. All these had advanced at an angle of 45°; their salutations had been deep salaams, and they passed to the right, and kissed the gold fringe of a scarf fastened to the arm of the throne, and held under the hand of the Mabeyingee-bache, or Lord Chamberlain. As soon as presented the great officers took their places within the lines of soldiers to the Sultan's right. Others advanced along the short slip of carpet at right angles to the throne; these were, I believe, the Effendis, or Princes of the Royal family, either nephews of the Sultan, or husbands of the Sultanas. As his Majesty kept his gaze fixed in front of him, he seemed to ignore these latter. The officers of the army now advanced, went through the usual ceremony, and took up their places to the Sultan's left, fronting the civil functionaries. Even the common soldiers advanced a certain distance, and not only salaamed, but went down on their knees, touching the forehead to the earth three times, and this they repeated at three different distances. Meanwhile Turkish and European airs were played very fairly, the band being led by a distinguished Italian, who is a Pacha.

Long before the soldiers had all salaamed, the priests, or Imâms, began to defile from the raised arched doorway opposite us. First came the Sheik-ul-Islam, or high priest, a grand old man, wearing a long white robe with a gold collar, and a white turban. He was followed by two suffragans in a similar dress. Then came a procession of priests walking two abreast; the first body of about thirty had long green robes and green turbans, this being the sacred color worn only by those who can claim to be descendants of the Prophet; like bodies followed in brown, in violet, and in blue, many of these last having white turbans. The Sultan rose to receive the clergy, who were allowed to kiss his robe instead of the gold scarf. The Sheik-ul-Islam now made a short

prayer, whilst all stood, holding the palms open and upward beside the face, which is the prescribed posture for offering thanksgiving. The ceremony was now over, and the Sultan rose and retired quickly. All the time this excessive homage had been rendered him, there had not been the slightest sign of answering courtesy in the face of his Majesty; intensely bored, he had remained stiff and stolid till the last salaam had been made him, with the one exception that he turned away his face with marked displeasure at the approach of those who were in disgrace. The ceremony had lasted only about an hour and a quarter, and all remained still and silent, until his Majesty had retired in the same state as he had come on his magnificent charger, the throne having been immediately covered and removed.

Eastern squalor and grandeur met that day side by side. Although we had been admitted by special tickets, the rabble, as I said, had contrived to get in, and barefooted, ragged urchins were clinging to the branches of the trees like so many sloths, in full view of the royal gaze. I was told that the one thing in Europe which struck the Sultan more than anything else was the fact that everybody there seemed neatly shod, and he seemed to think this an evidence of the triumph of good government! Not that his own people go barefoot, but that the poor were miserably down at heel in a literal as well as a metaphorical sense.

The court etiquette I have here described is repeated in its measure in every great household, as each chief officer of state holds his little court in the same manner in an ever-recurring cycle. The ladies also hold parallel receptions, and on this occasion the kadens of the Seraglios and the khanums of all the great houses had been astir before daybreak, as every one should be ready and in court dress by the moment the booming of the cannon announces the dawn. Ceremonious visits then commence with the chief lady, and the greeting exchanged is a hearty phrase, "*Bairam size moubarak olsun!*" (May Bairam blessings descend on you!) These visits are interrupted to permit of the ladies endeavoring to catch a glimpse of the Sultan's procession as he goes to mosque, for this is the utmost share allowed them

in the proceedings of the day, as no Mussulman woman is permitted to be present at the ceremony of the *baise-main*. Wives of Pachas will wait for hours in their carriages drawn up by the side of the pavement and jammed in by a dense crowd of a most motley description: Persians, with their dull blue skirt-like coats, and high purple brimless hats; mountebanks in sheepskins; peasants with dancing bears; Greeks, Syrians, and Arnâouts; but more than all are their eyes attracted to the lines of Circassian soldiers, where many a lady who was once a slave hopes to find the face of a brother or lover from whom she was parted years ago—and they do not always look in vain.

Besides the Bairam festival, there are other special occasions which demand an exchange of the amenities of civilised life. Such are the anniversary of the Sultan's accession, which is always honored by a general illumination and by visits of congratulation; the royal birthday, which demands nearly as great demonstrations; all religious festivals which require that congratulations should be expressed, as the Courban Bairam, corresponding to our Easter Day, or rather to the Jewish Passover, which is really the feast of sacrifice the Koran prescribes to be kept in commemoration of Abraham's intended offering of Ishmael; the Barrât Gedjah, or Night of Destiny; and the Muharrem Ghün, or New Year's Day. These festivals require that visits of great ceremony should be paid in due order, and the *fête* days are often spent in this way, every palace and large house being filled with crowds of gaily-dressed people who pass in and out continually on their friendly errands. The elevation of a Bey to the rank of Pacha, or the appointment of a Pacha to a place in the Ministry,—a birthday, circumcision, or marriage *fête*, also call for ceremonious visits from friends, which must be paid not only to the master but to the mistress of the house. Yet how can this be, it may be asked, where strict etiquette almost demands that one Pacha should tacitly ignore the existence of another Pacha's wives and daughters. This is one of the anomalies of Turkish life. It is sometimes considered requisite that the visit of the Pacha and his chief wife should be so timed that whilst the khan-

ums are seated on their divan, side by side, smoking the pipe of peaceful intentions and uttering low sentences expressive of good wishes, in which the words *Moubarak olsun!* (May all be well!) constantly recur at each deep wave of the hand in token of salaams, the chief eunuch should arrive from the Salaamlık as the bearer of a string of compliments from the husband of the visitor, which he utters with much respectful emphasis in the presence of the wife, who thereupon reiterates her lord's courteous greetings. This is the only approach to an exchange of intercourse permitted between a married lady and her husband's friend.

In Europe social life is diversified by court receptions, the opera, the theatre, balls, dinner-parties, garden-parties, rides and drives, walks, shopping, church-going, and foreign travel. All these have their counterpart more or less true or grotesque in Turkey. Take first court receptions. These, it is true, are rare, but they are very magnificent when they do occur. The grandest was that held in 1868 at the *fête* of the circumcision of Youssouff Izzeddin Efendi. As this was a public occasion, answering to our court drawing-rooms, the wives and daughters of all the great Pachas were obliged to present their congratulations in person to his Majesty; and, the strictest rule of all Turkish etiquette being for the time superseded by another even more stringent, no woman, whatever her rank, dare veil her face in the presence of the Commander of the Faithful.

I leave it to the imagination of those ladies who have undergone the ordeal of preparing a train and a curtsy for our own court, what anxious cares were bestowed on ugly green and garnet-colored satin gowns, puffed pantaloons to match, on huge wadded paletots worn over the dress, and on French satin shoes. But, above all, the head-dress was the most difficult to arrange, many of the ladies having short-cropped hair. Everything depends on the set of the *hôtase* or *coiffure* of colored silk gauze, and on the blaze of jewels fixed to it; crescents of diamonds, aigrettes of diamonds, sapphires, and rubies, pearls almost the size of strawberries, pear-shaped diamond earrings as large as hazel-nuts, or coronets resembling old-fashioned imperial

crowns. Moreover, the head-dress must be most firmly attached, for, as with us, a court *débutante* has to exercise herself in the most graceful manner of bending low before royalty, *there* a lady has to practise how she may best advance demurely with a long square train passed *between* her feet, drop suddenly on her knees, dip her forehead three times to the ground, kiss the hem of the august personage's *keurk*, or furred robe, if that happens to be worn at the time—and, after all this, retreat with good grace, and without losing her jewelled cap at the feet of her imperial sovereign. Some of the younger married ladies were courageous enough to adopt the European corsage combined with Turkish train and trousers; but the most ambitious of all were three young khanums who appeared in white court dresses made in faultless Parisian style, trimmed with wreaths of white roses gemmed with dew, and very simple coiffures to match. These youthful princesses looked altogether lovely, and when they advanced up the crowded presence-chamber they excited murmurs of admiration; they also saluted the Sultan by a deep curtsy only, he standing; but on passing to where the Validé Soultan was seated near her son, they made to her the customary acknowledgments. His Majesty was evidently much charmed by the grace and dignity of the sisters, and showed them marked attention by insisting that they should be seated—a sign of condescension and respect not extended to any other lady present. The Validé humored her son's whim saying to the eldest of the young princesses, whilst patting her on the shoulder and motioning her to be seated on the low cushions beside her, "*Ghel, kiss'm ghel! K'hosh gueldiniz, safa gueldiniz! Buyuruniz oturuniz!*" (Come, my child, come! Be welcome. Sit beside me.)

The effect of these exquisite toilettes on the taste of the Turkish kadens soon became apparent—they aimed at imitating French *modes* more than ever. Now to dress after the fashion of European women is tacitly to break the law of the land. Indeed, from time to time by-laws would be issued by the Zaptieh Pacha, or head of the police, reminding the khanums that this was the case. How these mandates became known I cannot

say, but the ladies would at times become fully aware "that it was prohibited to Mussulman women to imitate the Franks in the matter of dress," and very indignant did the interference make them. Such prohibitions would for a time check the influx of European fashions, but soon again the fair defaulter would return to some innovation in the way of a tight bodice *alla franca*, which they would hide when prudence demanded under the feridgee, or loose square-cut cloak, which is always worn out of doors. Often have I heard Turkish ladies, when preparing for the *promenade en voiture* (their chief distraction) discuss anxiously which of all their beautiful *fustans* they dared to put on, exclaiming, "*I shall wear this! this is not too much à la franque*"; besides, the zaptiehs would not dare to stop my carriage if they did see: so I shall wear it." And only the timid ones remained faithful to the straight costume regulated by law.

But all did not escape the vigilance of the police. I must here narrate a very sad incident, told me as perfectly true, which occurred to two attractive young Turkish ladies, the daughters of a man of position. I had met them but a short time before, and lunched with them. These sisters were pretty, fond of dress, but gentle modest girls, and their one fault was that they preferred Frank fashions to Turkish. In a season when it so happened that the Zaptieh Pacha chanced to be more fanatically disposed than usual with regard to the emancipation going on as to dress, an order was promulgated among the police of Stamboul that they had full liberty to stop any carriage in which the ladies were suspected of being in Frank costume, and to demand that the feridgee should be thrown open, and the robe shown. If the dress were found to be made with the tight waist, *alla franca*, the zaptieh might then pour forth volleys of insolent abuse on the head of the offending khanum, and might proceed to tear her yashmak and feridgee as a punishment for neglecting to obey the commands of the head of the police. The common zaptiehs are a brutal set, full of insolent swagger and self-importance. Imagine wretches of this sort assaulting two girls of refined nature, who believed their social position secured them from

public outrage. In the chief street of the public bazaar of Stamboul, crowded as it was on a Friday with sight-seers and idle loungers, these low zaptiehs stopped the carriage of the two young ladies I have spoken of—tore their dress and their veils, called them by the coarsest epithets, attracted a noisy and motley crowd—Turks, Greeks, Armenians—and at last allowed the carriage to proceed, the ladies striving to hide their tear-stained faces from the hooting rabble that followed. How deep an insult is the tearing of the veil those can estimate who know something of Eastern customs. The result of the outrage was, as I said, most sad. One of the sisters, a young wife, was in very delicate health; the shock in her case proved too much; she passed from one fainting fit to another; a serious illness followed, which ended in the loss of her life.

In speaking of the Validé Soultan, I called her bigoted as to the adoption of Frank customs. She was also exceedingly exclusive even in her own circle. I was once present at the marriage of a *Khanum Soultan*, or niece of the Sultan, Abdul Aziz. In this ceremony the Validé Soultan took part. As the head of the family on the female side, she sat in state at the top of the long *sofa* (or central reception saloon), and there, to the sound of music and singing, the bride was conducted in the presence of all the princesses of the imperial family to kiss the hem of the Validé's robe, as a sign of submissive reverence and gratitude on having an establishment given her. It is a fact that movable wooden screens of trellis-work were placed round the saloon, so as to shut off an oval space in the centre, in order to hide the Validé's sacred person from the evil eye of any *giaour* who might by chance have obtained admission among the crowds of *khanums* who come and go and have the *entrée* to a wedding according to Turkish etiquette. Not even a glimpse of the Validé's face was vouchsafed me, although I was a privileged guest; and all I saw of her was the blaze of jewels on her stomacher glittering through the trellis-work. After the young bridegroom had also been conducted to pay the same homage as his bride, the Validé retired to a boudoir set apart for her use, and shortly afterwards withdrew from

the wedding festivities, music and singing preceding her to the door of exit, while her attendants flung small silver coins by handfuls among the crowds in the saloons and passages. When she had left, ease succeeded restraint, and the four or five sultanas who remained to do the honors, rallied round the young bride, a very timid girl, only seventeen, who sat in an apartment decorated with black and silver, which struck me as funereal rather than bridelike. These sultanas, to each of whom I was presented in turn, were the sisters of Murad V. and of Abdul Hamid. The princesses were affable to me, and appeared amiable women, but they have a painfully timid manner, which is partly constitutional, and is also, in a great measure, owing to the seclusion in which they have been forced to live.

One fashion set by the Sultan and his mother was much followed by all the Pachas of official rank. Both were fond of building *Tchifliks*, or fancy farm-houses, where they could, when oppressed by the ceremonies and routine of court life, snatch a day's quiet and recreation in comparative tranquillity. For I must note in passing, that in the ordinary daily life of a Sultan, every action is burdened by ceremony—even going to the bath is a fatiguing ceremonial. Perhaps this was the reason why Abdul Aziz, when once there, sometimes passed twelve whole days without leaving the suite of apartments belonging to the *hamam*, or bath. It was reported that he sought this seclusion when fits of ill-temper, amounting almost to madness, seized him—though if he did it to escape ceremony, one would take it to be rather an evidence of sanity. His favorite *tchiflik* was at Allem Dag, a name meaning "the Mountain of my God." It can be reached either from Scutari or from the Sweet Waters of Asia. It was from the miniature white marble kiosk, unique of its kind, which marks the latter spot, that the late Abdul Aziz started in state with the Empress Eugénie and her suite to make an excursion to this *tchiflik*. The imperial lady was detained that day by a reception she gave to Turkish ladies of high rank; and whilst awaiting her arrival, the Grand Turk, forgetful of all dignity, his face flattened against the glass of the centre window of the kiosk,

remained eagerly straining his sight towards the Palace of Beylerbey whence she was expected. Deep green valleys and broad heaths, rich with chrome yellow and red loam soils, bordered the road, till their Majesties reached the small village of Allem Dag, consisting of a few poor wooden houses; but leaving these on one side, they drove to the "farm-house," which is rather a country-house, filled with a good deal of rich furniture, satin hangings, &c. I believe there was once a *ménagerie* here, but it is now at the *Ghulhana* (place of roses), near the old Seraglio. A large building, beautifully kept, is set apart for the sole use and benefit of thousands of pigeons of every hue and variety of plumage; for the pigeon is a sacred bird with the Turks, being revered as the dove which brought the olive-branch to Noah, and hundreds of these birds are to be found round every mosque, where they are fed at the public expense.

Allem Dag is famous for a natural source of water, most pure and invigorating. It is a favorite spot for a picnic once or twice in the summer, when the more adventurous of European residents summon courage for the long ride, in a hot sun, over sandy heath covered with tangled grass and bushes of purple-headed wild lavender; but it lies too far from civilised dwellings to make it exactly safe to repeat one's visits too often, lest banditti might hear of one's coming and be prepared. Very few casual visitors to Constantinople have penetrated so far as Ailam Dag, I imagine, nor have I seen a description of it in any book. When I first saw the source, it was nearly in its natural state, flowing out from beneath a rough slab bearing an inscription, and, falling into a rude basin formed by rock and soil, the stream lost itself far down in the valley below, where its refreshing waters were wasted on the tangled vegetation which it made wildly luxuriant. How often in the burning summer-time, when the inhabitants of Pera, on the opposite European side, could hardly obtain water fit to drink from the *soujees*, who carry it about in little barrels for sale—when, in case of a fire, there was no water at hand—how often have I thought of the refreshing stream at Allem Dag, and wished it could be utilised by being brought to

Scutari by bends, in the same way as water is conveyed to Pera from the village of Belgrade, near Therapia. It is, perhaps, considered too sacred a stream to be used for ordinary purposes.

Let me now describe a very delightful excursion I made in the spring of 1868, passing a whole week in a *tchiflik* situated among the Asian hills, within an easy ride of Beicos. The "farm"-house was built on the model of a Swiss *châlet*, the *kaffès* to the windows and dome of its Turkish bath alone adding characteristic features as an Eastern domicile. It had only just been completed, and had a bright, cheerful appearance, contrasting with the half-rotten, black wooden structures of the houses in the village, which were not numerous, and inhabited only by small farmers and laborers. All the surroundings of the *tchiflik* looked busy and prosperous. Men were raking and hoeing in the long narrow garden in the front of which the house stood, with a small grass-plot and carriage-drive before it; the rest of the garden ground was divided into square beds, where neat rows of vegetables of many sorts were beginning to disclose their varied greens in unsullied brightness. A broad mountain stream came tumbling and brawling in a foaming mass just outside the garden on the left. On the right, sandy hills were daily being cleared of heath and brushwood, and planted with young fruit-trees. Green hills, covered with sheep and buffaloes at pasture, formed a near background to the picture, and up above, what space was left for sky was of a soft, serene blue.

Our party numbered about fifty, forty of whom belonged to the hareem, and completely filled the *châlet*, the gentlemen having lodgings in the village, and leaving the *tchiflik* to the guardianship of a strong party of eunuchs and to *Arnâout* guards (Albanians), who are said to belong to gangs of robbers whom they keep in check for the sake of the subsidy they receive as the price of their escort. Fortunately we had lovely weather during our stay, for our six or eight rooms were overcrowded at night when the Eastern bedding literally covered all available floor space, and looked like so many mounds of graves side by side. In the daytime we were all eager to be up and out as much as possible. With the first

beams of daylight we were astir and clamorous for whatever we could obtain in the way of food from the still sleepy eunuchs. Slices of coarse bread, goat-cheese and olives, with milk or coffee, formed our first meal, and then I, in a riding habit, and the Turkish ladies and slaves in yeldemas, or plain white calico dresses drawn over their colored fustans, would sally forth to wander on the heights, gather wild flowers, and delight ourselves to our hearts' content with an unwonted sense of freedom and of a common enjoyment in the beauties of nature which few of the women had ever felt.

"I had gone out one morning before the sun had actually risen, and whilst the shafts of jasper rays were only beginning to flood the grand over-arching down of sky behind the shady hills that enclosed the village. Coming suddenly on a most picturesque nook, I stood still, overpowered by a home-sick longing. "Oh! to be in England, now that April's here," came involuntarily to my lips as a "thing of beauty" in a rough place woke up old memories; it was merely a branch of a young cherry-tree weighed down with its wealth of large snow-white blossoms gleaming like pearl crystals in a light as yet untinted by the gold of the rising sun, but it stirred me with a mighty power.

"Is it like Ingelterra, Cocona dear?" said a voice at my side, in a foreign accent, and somebody linked the taper fingers of two pretty hands across my arm.

I turned to look into a very sweet, ingenuous face, pale and delicate, but half hidden by a snowy yashmak which only made the hazel eyes more tenderly luminous.

"The cherry blossom—look, Indjie,* that is like England," I answered, "but not the hills nor the trees nor the houses, unless it is Pacha Effendi's tchiflik, and that is a copy of a Swiss châlet, which is not English, as you know."

"Look, I put pink flowers in my hôtose, but I now throw them away," said Indjie, suiting the action to the word. "I will take the cherry flowers and give you some and keep some, and make me look like a bride;" and Indjie

blushed and laughed, and leant over to reach the white sprays.

But the young fruit-tree stood far back from the wooden fence that enclosed the garden of a tumble-down Turkish cottage, its delicate blossoms trailed on the dull blue-green acanthus-like leaves of a bed of artichokes, heavy yet with the morning dew, and, tempting as they were, we could not reach them. Giving up the vain effort, we leant against the fence and chatted.

"Why do you want to make yourself look like a bride to-day, Indjie?" I questioned; "is it you that they have chosen as a bride for Rechid Effendi? I know that he has asked the Pacha to give him an establishment."

Indjie was rosy and confused by this time, pulling ruthlessly at the leaves that grew through the paling.

"Oh no! Cocona dear! Rechid Effendi not think any more of me. He quite forget old childlike days when we played together and go to school together. I not think of him."

But Indjie ended with some despitte, and there were tears in the soft eyes.

"Oh, I am afraid you have not forgotten him, Indjie!" I exclaimed, "and you will be unhappy if they give him another wife. Who is it that he is to have?"

"Ayesha Khanum not tell me, but Rechid Effendi come every day to Lollah Beshire's room and call her and talk, talk all times. Then Ayesha Khanum go talk to Buyuk Khanum Effendi till five o'clock, six o'clock (near midnight) and send me away to get cigara. Truly I not know."

"Perhaps, then, Indjie dear, you may be chosen," I said, to comfort her. "Don't be sorry; you will soon know."

"I think Khanum Effendi not give me; she like me to give her cigara and chibouk. I always her little girl from that high time," holding out her hand a yard from the ground; "how she give me away from her?"

"Oh yes! Indjie, she would. She is kind-hearted if she is passionate, and Buyuk Khanum would like to see you happy."

"Ah! you not know all!" said Indjie; "Great Khanum always keep me at her side. She very afraid."

* Pearl.

"What can you mean? Surely she is not jealous about Pacha Effendi?"

Indjie looked about to see no one was near, and then answered in a very low voice, "Pacha wants to buy me for five hundred lira. Khanum Effendi say NO. I not want to be Pacha's girl. He asked now three times. Three times I say no."

Here was a revelation indeed! This quiet, gentle girl, who had been under my eyes for days, had been going through a trial such as no woman in our land can be called on to suffer, and had never betrayed her trouble and anxiety even to her best friend. She knew she could trust me, but she had not made me her *confidante* hitherto. I had certainly heard by a side wind that Buyuk Khanum had been in some perplexity and in a state of constant ill-temper for more than a fortnight before we took our holiday to the country; and Indjie's story had thrown a light on the reason of our coming,—the Buyuk Khanum was to be propitiated, and her husband would propose his mercenary bargain once more when she was in a better mood.

"I very sorry," said Indjie. "I do nothing against Khanum Effendi. I always very good girl: you know."

I did know; and I began to think and to pity Indjie from the bottom of my heart. There were complications in the whole business which made it difficult to predict how the matter would end.

"Only keep up a good heart, Indjie," I counselled, "and never go out of Khanum Effendi's sight. Then all will be well."

At this point in our conversation the door of the little cottage was swung suddenly open, and a tall, manly, brisk person stepped into the garden, and seeing us stopped short. He was about six-and-twenty, bronzed, with thick dark hair cut short and just showing under his fez; dark eyes and a frank smile.

"Sabah sherif hair oulsiniz!" (Good morning to you!) was his unabashed salutation, while the color nevertheless mounted to his sun-burnt cheeks at the unexpected rencontre. "Are you going to ride so early?" he continued. "I was going to look after the horses."

"You may gather me first the white flower, Rechid Effendi," I said. "We

could not reach it, and Indjie Calpha *particularly* wants it."

"*Moutlakar* istior!" (Special wants!) repeated the young man, gathering the blossoms and presenting them. "Why?"

"That I will tell you at another time, Effendi," I said. "Only Indjie Calpha is very English in her ways."

The young man looked puzzled as we went on our way towards the *tchiflik* with our spoils, leaving him to attend to a string of *begherjees* (horse-drivers) who at the moment came up the lane to be hired.

My friend, half-pleased, half-vexed, hurried home to pin her precious blossoms in her *hôtose*, so that they might be as becoming as possible, and I followed to accompany her.

Rechid Effendi was the *Kiatib* or Secretary of the Pacha. He had grown up in the household, and had made his way by sheer force of merit. At this time he happened to be one of the few marriageable young men belonging to the establishment, and I knew that he had petitioned the Khanum Effendi to spare him a wife from amongst some of her Calphas. Knowing very well that he had been an old playmate of Indjie Calpha's, I quite understood that his hope in making the appeal just then had been to save the young girl from the fate the Pacha offered her. It remained to be seen if the wife had comprehended the opportunity. This seemed self-evident, yet why had so great a delay been permitted in making the decision? Ayesha Khanum was reticent, and seemed to be playing a double game. Would she favor the Pacha's views or those of the wife? No one could tell which might be most to her own interest, and perhaps she was not clear on the point herself. At all events she took no decided part, but nearly worried herself to death with trotting between the harem and the *lollah's* room where she held her audiences. Negotiations seemed to be in abeyance at the time of our visit to the *tchiflik*, and the old woman busied herself with more substantial matters than love-making, for she had to cater for very hungry people, and to make provision for continual picnics. To-day was one of her busiest days, as our cavalcade was to start early for the Giant's Mountain, a

famous spot not far inland from the junction of the waters of the Bosphorus and Black Sea.

It was amusing enough to watch the scene on the grass-plot before the house, where the women were mounting the rough country ponies. There was nothing for it but to sit astride on the high red-velvet saddles, and they professed great envy at the easy seat I possessed on the side-saddle I had had the forethought to bring. The yeldema, indeed, made it no easy matter to sit on horseback either with or without a pommel, and the Turkish ladies felt the seat so insecure that they declared loudly they had not the courage to move unless footmen ran by their side ready to catch them if there were the least danger. This promise was assented to from the salaamlık, and all the old retainers about the person of the Pacha were pressed, not unwillingly, into the day's especial service. These men were many of them married to some of the old Calphas, and the ladies started a running conversation on their home news as they approached near enough to hold up the great fringed umbrella taken as much for show as for shade. It was a pretty sight, indeed, to watch the long cavalcade as it wound in and out amongst the spring-foliage, following the winding course of the narrow foot-paths that led up the mountain sides. The Pacha, with his more immediate attendants, rode some little way ahead of the women, and the armed Arnâout, in his picturesque dress, his girdle stuck full of weapons, and an old blunderbuss dangling in his hand, was the leader of the party. Then came the Buyuk Khanum on a fine white pony with scarlet trappings, with one man to lead the animal, two to hold her on, and eunuchs in attendance. So followed the Ortanji Khanum and the three younger khanums, and then a long string of Calphas and Ninas, many of whom had no attendants but the begherjees, or horsekeepers. Here you saw the singing girls hopelessly struggling with a refractory brute that would not be induced to cross a stream, there you saw a pack-saddle turn under the animal it belonged to; now a rein had broken and was past mending, here fallen trees brought the line to a standstill.

Alhamdu lillah! At last we all reach

the platform top of the Giant's Mountain, hot, out of breath, thirsty, and quite ready for the savory roast lambs preparing for us on one side under the trees. Mats were spread for the tired girls, carpets for the Pacha and his wives, and, from the Imâm's house, sheets and colored hangings were brought and fastened round an enclosed space to form a division between the women and the men. There was plenty to talk of whilst resting, and the scene around offered a feast to the eyes. But a more prosaic feast had first to be despatched gratefully, little favorite dishes being passed under the curtain as presents from the gentlemen's table to the ladies', and *vice versa*. We then dispersed to place our carpets opposite some favorite view. Wood and water, green spring foliage, and mirrored sky or silver surfaces, lay stretched at our feet. Or, if you lay back in some thyme-carpeted nook, you might lose yourself in the wide expanse of pure blue sky in watching the outstretched wings of four or five eagles, seen far above like larks, which the eye seeks almost in vain, whilst nearer, kites whirled above our heads, watching for the remains of our repast.

In such a nook an important confidence was made me. It was not Indjie who had been chosen for Rechid Effendi, but a certain Pembê* Calpha, whose much longer service in the house entitled her to the first chance of an establishment. This girl was all very well, but she was older than the young man, of a remarkably quiet, indifferent disposition, and not at all suited to him. I was a good deal disappointed; not so Indjie; the news did not seem as yet to have reached her, and she appeared occupied only with the opportunities that day had offered of seeing and exchanging a few sentences with the Effendi, who, for his part, had been devoting himself to the service of the Buyuk Khanum, with, I thought, very politic views. I hoped all might yet go well.

But we had a great deal to see besides the view. There is a mosque and a *turbeh*, or mausoleum, on the summit of the Giant's Mountain. The mosque had been thrown open for the use of those who wished to perform their devotions,

* Pink or rosy.

and whilst the more devout were thus occupied, I and another European lady were taken by some of the gentlemen of our party to the top of the minaret, from whence the view is magnificent. Far to the North lay the Black Sea, with a grave tinting even under that bright sun; below us were the forts of Kavak, marking the entrance of the Straits. On the other side, the Bosphorus wound in and out like a thread of silver, up to the point where Stamboul lay in a golden haze, with the Marmora beyond. Opposite us were the hills of Europe—Therapia, Buyukdere, Yenimahale, whose palaces and pretty kiosks looked like the diminutive dwellings of Lilliputian land.

Off to the east lay the wide expanse of wood stretching away to the Asian continent—hill behind hill in graceful curves, bluer and fainter till they merged into the sky-line. Immediately below us stretched the Sultan's Valley, one broad new roadway marking its course, and troops belonging to the barracks at Unkiar-Iskellessi were being drilled there. Lifted up as it were into the sky on the minaret of a mosque, itself on the summit of the Giant's Mountain, the scene was magnificent, and I did not easily tire of this splendid view, but the tomb, or *turbeh*, had yet to be seen. There was some demur about my being permitted to enter, but when I entreated permission in Turkish, and showed brand-new light boots, it was easily granted. Here, within a neat enclosure, walled in, was a tomb, or rather grave, some nine or ten feet long, and five or six in breadth. My companions assured me it contains the *leg* only of the prophet Elijah, whom they call Ooshâ, and account a giant, and the impress of whose step is said to be still visible on the flattened summits of some of the surrounding hills. Around the grave and under the walls were many rose-bushes, perfectly covered with shreds of colored and white rags, which devotees tie on the twigs when making their *neer*, or vows, for they believe that any wish made on this sacred spot is certain of fulfilment. Indjie Calpha and I, each religiously made our wish, and tied a strip of fine white muslin on the bushes. Whether our requests were granted I must not tell in this place.

Elijah is believed to have inherited a
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supernatural existence, having drunk of the water of life. He is thought to have been the *Ckooth*, or invisible beneficent spirit of his time, who appears to all good Moslems in their times of perplexity. It is to be hoped our pilgrimage went far to secure decision in the matter which so many of our party felt perplexing. Pembé Calpha, indifferent as she seemed, no doubt made her *neer* as hopefully as did Indjie. To others also this spot was sacred ground; I have no doubt they repeated here the *fatieh*, or opening chapter of the Koran, passing their hands devoutly over the face, concluding their whispered prayer with the words:—"Extol the perfection of thy Lord—the Lord of Might—exempting Him from that which they (the unbelievers) ascribe to Him (viz. the having a Son or partaker of His Godhead); and peace be on the Apostles, and praise be to God, the Lord of all creatures. O God, I have transferred the merit of what I have recited from the excellent Koran to the Prophet to whom this place is dedicated. O God! I adjure thee by the Prophet, and by him to whom this place is dedicated, to grant me my request." Probably several of our party took home amulets which the Imam had written for them, and which are designed to protect them from threatened dangers. We all seemed to have enough to do and to see before we each deposited our few coins in the metal plate which is devoted to offerings for the poor. At last we were all once more in the saddle, and slowly descending the stony path. Some of the ladies were very timid during the descent, but arrived on the broad new road in the Sultan's Valley, they became more courageous and determined to try the mettle of the horses. This was the cause of an accident which might have been serious. The Buyuk Khanum was run away with, and thrown to the ground heavily. There was an ugly wound in the head, and some loss of blood. Of course I was at once called on to act hakim, and by good chance was able to put my patient into an *araba*, or heavy-looking wagon of carved oak, which happened to be passing. We arrived home quite tired out, after a most delightful day, the younger khanums bent on going out next time in a Frank riding-habit and on a side-saddle.

"Cocona dear, you will teach us to ride as you do, will you not?" they said, beseechingly. And I longed to do so, but I saw, alas, too many obstacles in the way of such bold defiance of Musulman customs. Every morning of our stay, the poor, lean, long-necked *beghirs*, rough, untrained pack-ponies, were driven early to be hired, and every day brought us some pleasant excursion in the neighborhood. There were still two or three chance meetings for Indjie and Rechid, while Pembé and Indjie (who had become great friends) were frequently to be seen looking through the kaffès into the court-yard of the salaamlik when the Effendi happened to be there. How much of this he knew I could not guess, but he most prudently kept his gaze turned from the windows,

and was evidently making steps in the Buyuk Khanum's good graces. As to the Pacha, he was more amiable and jovial than usual, and seemed to ignore what was a source of anxiety to many of our party.

Now the sort of holiday life I have sketched during this visit was unusual, I must admit, for the neighborhood of Stamboul. At Broussa, a favorite Oriental watering-place, lying just below the snow-capped Mount Olympus, it might, I suppose, be repeated over and over again. Much, however, depends on the season of the year. Our holiday was in honor of the Muharrem, or New Year, which is a time of great rejoicings, and has many curious customs peculiar to itself.—*Cornhill Magazine*.

A CHOOSING.

"THE child is mine," said the Daylight,
 "For she is most like me;
 So get thee hence, thou grey Night,
 We've nought to do with thee!
 Her eyes are blue as my skies;
 Her locks are like the sun:
 She shall but sleep 'neath thy skies,
 When my glad hours are done."

Not so," then spake the Night-time,
 "She's fair as is my moon;
 And her voice is like the love-rhyme
 My own bird sings in June;
 Her eyes are like the star-gems
 Set far above the sun;
 And her breath is sweet as the blossoms
 That open when thou art gone."

"Choose thou me," said the Daylight,
 "For aill the world is mine:
 The birds sing in my gay light,
 Like gold the waters shine:
 And mine are all the best flowers
 That over the whole earth grow;
 And mine are all the blithe hours
 Wherein men come and go."

"Nay, be thou mine," said the Night-time,
 "For I too can give thee gold:
 Paler indeed is my bright time,
 Fainter, and somewhat cold:
 But the lover loves my fay-light;
 With me the poet sings best;
 While the toiling children of Daylight
 Can use me but for rest."

Then she answered, "While flowers sunlit,
While the bird and the humming-bee,
And the eyes of playmates fun-lit,
Are joys enough for me—
While burdens are light for bearing,
While sorrow is loth to stay—
So long, beyond all comparing,
I will love thee best, O Day!

"But when I shall find a gladness
To all but myself unknown;
And when there shall come a sadness
I needs must endure alone:
When grief is too great for weeping—
When bliss cannot bear the light—
'Tis then, while the rest are sleeping,
That I'll watch with thee, O Night."

Temple Bar.

CHARLOTTE BRONTË. A MONOGRAPH.

BY T. WEMYSS REID.

VI.

THE "storm and stress" period of Charlotte Brontë's life was not what the world believes it to have been. Like the rest of our race, she had to fight her own battle in the wilderness, not with one devil, but with many; and it was this sharp contest with the temptations which crowd the threshold of an opening life which made her what she was. The world believes that it was under the parsonage roof that the author of *Jane Eyre* gathered up the precious experiences which were afterwards turned to such good account. Mrs. Gaskell, who was carried away by her honest womanly horror of hardened vice, gives us to understand that the tragic turning-point in the history of the sisters was connected with the disgrace and ruin of their brother. We are even asked to believe that but for the folly of a single woman, whom it is probable that Charlotte never saw, "Currer Bell" would never have taken up her pen, and no halo of glory would have settled on the scarred and rugged brows of prosaic Haworth.

It is not so. There may be disappointment among those who have been nurtured on the traditions of the Brontë romance, when they find that the reality is different from what they supposed it to be; some shallow judges may even assume that Charlotte herself loses in

moral stature when it is shown that it was not her horror at her brother's fall which drove her to find relief in literary speech. But the truth must be told; and for my part I see nothing in that truth which affects, even in an infinitesimal degree, the fame and the honor of the woman of whom I write.

It was Charlotte's visit to Brussels then, first as pupil and afterwards as teacher in the school of Madame Héger, which was the turning-point in her life, which changed its currents, and gave to it a new purpose and a new meaning. Up to the moment of that visit she had been the simple, kindly, truthful Yorkshire girl, endowed with strange faculties, carried away at times by burning impulses, moved often by emotions the nature of which she could not fathom, but always hemmed in by her narrow experiences, her limited knowledge of life and the world. Until she went to Belgium her sorest troubles had been associated with her dislike to the society of strangers, her heaviest burden had been the necessity under which she lay of tasting that "cup of life as it is mixed for governesses" which she detested so heartily. Under the belief that they could qualify themselves to keep a school of their own if they had once mastered the delicacies of the French and German languages, she and Emily set off for this sojourn in Brussels.

One may be forgiven for speculating as to her future lot had she accepted the offer of marriage she received in her early governess days, and settled down as the faithful wife of a sober English gentleman. In that case *Shirley* perhaps might have been written, but *Jane Eyre* and *Villette* never. She learnt much during her two years' sojourn in the Belgian capital; but the greatest of all the lessons she mastered whilst there was that self-knowledge the taste of which is so bitter to the mouth, though so wholesome to the life. Mrs. Gaskell has made such ample use of the letters she penned during the long months which she spent as an exile from England, that there is comparatively little left to cull from them. Everybody knows the outward circumstances of her story at this time. For a brief period she had the company of Emily; and the two sisters, working together with the unremitting zeal of those who have learned that time is money, were happy and hopeful, enjoying the novel sights of the gay foreign capital, gathering fresh experiences every day, and looking forward to the moment when they would return to familiar Haworth, and realize the dream of their lives by opening a school of their own within the walls of the parsonage. But then Emily left, and Charlotte, after a brief holiday at home, returned alone. Years after, writing to her friend, she speaks of her return in these words:—"I returned to Brussels after Aunt's death against my conscience, prompted by what then seemed an irresistible impulse. I was punished for my selfish folly by a total withdrawal for more than two years of happiness and peace of mind." Why did she thus go back "against her conscience?" Her friends declared that her future husband dwelt somewhere within the sound of the chimes of St. Gudule, and that she insisted upon returning to Brussels because she was about to be married there. We know now how different was the reality. The husband who awaited her was even then about to begin his long apprenticeship of love at Haworth. Yet none the less had her spirit, if not her heart, been captured and held captive in the Belgian city. It is not in her letters that we find the truth regarding her life at this time. The truth indeed is there, but

not all the truth. "In catalepsy and dread trance," says Lucy Snowe, "I studiously held the quick of my nature. . . . It is on the surface only the common gaze will fall." The secrets of her inner life could not be trusted to paper, even though the lines were intended for no eyes but those of her friend and confidante. There are some things, as we know well, the heart hides as by instinct, and which even frank and open natures only reveal under compulsion. One of the hardest features of the last year she spent at Brussels was the necessity that she was under of locking all the deepest emotions of her life within her own breast, of preserving the calm and even cold exterior, which should tell nothing to the common gaze, above the troubled, fevered heart that beat within.

"When do you think I shall see you?" she cries to her friend within a few days of her final return to Haworth; "I have of course much to tell you, and I dare say you have much also to tell me—things which we should neither of us wish to commit to paper. . . . I do not know whether you feel as I do, but there are times now when it appears to me as if all my ideas and feelings, except a few friendships and affections, are changed from what they used to be. Something in me which used to be enthusiasm is tamed down and broken. I have fewer illusions. What I wish for now is active exertion—a stake in life. Haworth seems such a lonely, quiet spot, buried away from the world. I no longer regard myself as young; indeed I shall soon be twenty-eight, and it seems as if I ought to be working and braving the rough realities of the world as other people do. It is, however, my duty to restrain this feeling at present, and I will endeavor to do so."

Yes; she was "disillusioned" now, and she had brought back from Brussels a heart which could never be quite so light, a spirit which could never again soar so buoyantly, as in those earlier years when the tree of knowledge was still untasted, and the mystery of life still unrevealed. This stay in Belgium was, as I have said, the turning-point in Charlotte Brontë's career, and its true history and meaning is to be found, not in her *Life* and letters, but in *Villette*, the master-work of her mind, and the revelation of the most vivid passages in her own heart's history. "I said I disliked Lucy Snowe," is a remark which Mrs. Gaskell innocently repeats in her memoir of Charlotte Brontë. One need not be surprised at it. Lucy Snowe was never

meant to be liked—by everybody; but none the less is Lucy Snowe the truest picture we possess of the real Charlotte Brontë; whilst not a few of the fortunes which befell this strange heroine are literal transcripts from the life of her creator. One little incident in *Villette*—Lucy's impulsive visit to a Roman Catholic confessor—is taken direct from Charlotte's own experience. During one of the long lonely holidays in the foreign school, when her mind was restless and disturbed, her heart heavy, her nerves jarred and jangled, she fled from the great empty schoolrooms to seek peace in the streets; and she found, not peace perhaps, but sympathy at least, in the counsels of a priest, seated at the Confessional in a church into which she wandered, who took pity on the little heretic, and soothed her troubled spirit without attempting to enmesh it in the folds of Romanism. It was from experiences such as these, with a chastened heart and a nature tamed down, though by no means broken, that she returned to familiar Haworth, to face "the rough realities of the world."

Rough, indeed, those realities were in her case. Her brother, once the hope of the family, had now become its burden and its curse; and from that moment he was to be the prodigal for whom no fatted calf would ever be killed. Her father was fast losing his eyesight; she and her sisters were getting on in life, and "something must be done." Charlotte had returned home, but her heart was still in Brussels, and the wings of her spirit began to beat impatiently against the cage in which she found herself imprisoned. It was only the old story. She had gone out into the world, had tasted strange joys, and drunk deep of waters the very bitterness of which seemed to endear them to her. Returning to Haworth she went back a new woman, with tastes and hopes which it was hard to reconcile with the monotony of life in the parsonage which had once satisfied her completely.

"If I *could* leave home I should not be at Haworth," she says soon after her return. "I know life is passing away, and I am doing nothing, earning nothing; a very bitter knowledge it is at moments, but I see no way out of the mist." And then, almost for the first time in her

life, something like a cry of despair goes up from her lips: "Probably when I am free to leave home I shall neither be able to find place nor employment. Perhaps, too, I shall be quite past the prime of life, my faculties will be wasted, and my few acquisitions in a great measure forgotten. These ideas sting me keenly sometimes; but whenever I consult my conscience it affirms that I am doing right in staying at home; and bitter are its upbraidings when I yield to an eager desire for release."

But this outburst of personal feeling was exceptional, and was uttered in one ear only. Within the walls of her home Charlotte again became the house-mother, busying herself with homely cares, and ever watching for some opportunity of carrying her plan of school-keeping into execution. Nor did she allow either the troubles at home or that weight at her own heart which she bore in secrecy to render her spirit morbid and melancholy. Not a few who have read Mrs. Gaskell's work labor under the belief that this was the effect which Charlotte Brontë's trials had upon her. As a matter of fact, however, she was far too strong, brave, cheerful—one had almost said manly—to give way to any such selfish repinings. She never was one of those sickly souls who go about "gloom-ing over the woes of existence, and how unworthy God's universe is to have so distinguished a resident." Even when her own sorrows were deepest and her lot seemed hardest, she found a lively pleasure in discussing the characters and lots of others, and expended as much pains and time in analysing the inner lives of her friends as our sham Byrons are wont to expend upon the study of their own feelings and emotions. Let the following letter, hitherto unpublished, written at the very time when the household clouds were blackest, speak for her freedom from morbid self-consciousness, as well as for her hearty interest in the well-being of those around her:—

"You are a very good girl indeed to send me such a long and interesting letter. In all that account of the young lady and gentleman in the railway carriage I recognize your faculty for observation, which is a rarer gift than you imagine. You ought to be thankful for it. I never yet met with an individual devoid of observation whose conversation was interesting, nor with one possessed of that power in

whose society I could not manage to pass a pleasant hour. I was amused with your allusions to individuals at —. I have little doubt of the truth of the report you mention about Mr. Z— paying assiduous attention to —. Whether it will ever come to a match is another thing. Money would decide that point, as it does most others of a similar nature. You are perfectly right in saying that Mr. Z— is more influenced by opinion than he himself suspects. I saw his lordship in a new light last time I was at —. Sometimes I could scarcely believe my ears when I heard the stress he laid on wealth, appearance, family, and all those advantages which are the idols of the world. His conversation on marriage (and he talked much about it) differed in no degree from that of any hackneyed fortune-hunter, except that with his own peculiar and native audacity he avowed views and principles which more timid individuals conceal. Of course I raised no argument against anything he said. I listened and laughed inwardly to think how indignant I should have been eight years since if anyone had accused Z— of being a worshipper of Mammon and of Interest. Indeed I still believe that the Z— of ten years ago is not the Z— of to-day. The world with its hardness and selfishness has utterly changed him. He thinks himself grown wiser than the wisest. In a wordly sense he is wise. His feelings have gone through a process of petrification which will prevent them from ever warring against his interest; — but Ichabod! all glory of principle and much elevation of character are gone! I learnt another thing. Fear the smooth side of Z—'s tongue more than the rough side. He has the art of paying peppery little compliments which he seems to bring out with a sort of difficulty, as if he were not used to that kind of thing, and did it rather against his will than otherwise. These compliments you feel disposed to value on account of their seeming rarity. Fudge! They are at any one's disposal, and are confessedly hollow blarney."

Still more significant, however, is the following letter, showing so kindly and careful an interest in the welfare of the friend to whom it is addressed, even whilst it bears the bitter tidings of a great household sorrow:—

"July 31, 1845.

"I was glad to get your little packet. It was quite a treasure of interest to me. I think the intelligence about G— is cheering. I have read the lines to Miss —. They are expressive of the affectionate feelings of his nature, and are poetical, inasmuch as they are true. Faults in expression, rhythm, metre, were of course to be expected. All you say about Mr. — amused me much. Still I cannot put out of my mind one fear, viz., that you should think too much about him. Faulty as he is and as you know him to be, he has still certain qualities which might create an

interest in your mind before you were aware. He has the art of impressing ladies by something involuntary in his look and manner; exciting in them the notion that he cares for them, while his words and actions are all careless, inattentive, and quite uncompromising for himself. It is only men who have seen much of life and of the world, and who are become in a measure indifferent to female attractions, that possess this art. So be on your guard. These are not pleasant or flattering words; but they are the words of one who has known you long enough to be indifferent about being temporarily disagreeable, provided she can be permanently useful.

"I got home very well. There was a gentleman in the railroad carriage whom I recognized by his features immediately as a foreigner and a Frenchman. So sure was I of it that I ventured to say to him, 'Monsieur est français, n'est-ce pas?' He gave a start of surprise, and answered immediately in his own tongue. He appeared still more astonished and even puzzled when after a few minutes' further conversation I inquired if he had not passed the greater part of his life in Germany. He said the surmise was correct. I had guessed it from his speaking French with the German accent.

"It was ten o'clock at night when I got home. I found Branwell ill. He is so very often, owing to his own fault. I was not therefore shocked at first. But when Ann informed me of the immediate cause of his present illness I was very greatly shocked. He had last Thursday received a note from Mr. — sternly dismissing him. . . . We have had sad work with him since. He thought of nothing but stunning or drowning his distressed mind. No one in the house could have rest, and at last we have been obliged to send him from home for a week with some one to look after him. He has written to me this morning and expresses some sense of contrition for his frantic folly. He promises amendment on his return; but so long as he remains at home I scarce dare hope for peace in the house. We must all I fear prepare for a season of distress and quietude. I cannot now ask Miss — or any one else."

The gloom in the household deepened; but Charlotte was still strong enough and brave enough to meet the world, to retain her accustomed interest in her friends, and to discuss as of yore the characters and lives of those around her. Curious are the glimpses one gets of her circle of acquaintances at this time. Little did many of those with whom she was brought in contact think of the keen eyes which were gazing out at them from under the prominent forehead of the parson's daughter. Yet not the least interesting feature of her correspondence is the evidence it affords that she was gradually gaining that knowledge of

character which was afterwards to be lavished upon her books. A string of extracts from letters hitherto unpublished will suffice to show how the current of her life and thoughts ran in those days of domestic darkness, whilst the dawn of her fame was still hidden in the blackest hour of the night:—

"I have just read M——'s letters. They are very interesting, and show the original and vigorous cast of her mind. There is but one thing I could wish otherwise in them, and that is a certain tendency to flightiness. It is not safe, it is not wise; and will often cause her to be misconstrued. Perhaps *flightiness* is not the right word; but it is a devil-may-care tone which I do not like when it proceeds from under a hat, and still less from under a bonnet."

"I return you Miss ——'s notes with thanks. I always like to read them. They appear to me so true an index of an amiable mind, and one not too conscious of its own worth. Beware of awakening in her this consciousness by undue praise. It is a privilege of simple-hearted, sensible, but not brilliant people that they can *be* and *do* good without comparing their own thoughts and actions too closely with those of other people, and thence drawing strong food for self-appreciation. Talented people almost always know full well the excellence that is in them You ask me if we are more comfortable. I wish I could say anything favorable; but how can we be more comfortable so long as Branwell stays at home and degenerates instead of improving? It has been lately intimated to him that he would be received again on the same railroad where he was formerly stationed if he would behave more steadily, but he refuses to make an effort. He will not work, and at home he is a drain on every resource, an impediment to all happiness. But there's no use in complaining."

"I thank you again for your last letter, which I found as full or fuller of interest than either of the preceding ones—it is just written as I wish you to write to me—not a detail too much. A correspondence of that sort is the next best thing to actual conversation, though it must be allowed that between the two there is a wide gulf still. I imagine your face, voice, presence very plainly when I read your letters. Still imagination is not reality, and when I return them to their envelope and put them by in my desk I feel the difference sensibly enough. My curiosity is a little piqued about that countess you mention. What is her name? you have not yet given it. I cannot decide from what you say whether she is really clever or only eccentric. The two sometimes go together, but are often seen apart. I generally feel inclined to fight very shy of eccentricity, and have no small horror of being thought eccentric myself, by which observation I don't mean to insinuate that I class myself under the head clever. God knows a more consummate ass in

sundry important points has seldom browsed the green herb of His bounties than I. O Lord, Nell, I'm in danger sometimes of falling into self-weariness. I used to say and to think in former times that X—— would certainly be married. I am not so sanguine on that point now. It will never suit her to accept a husband she cannot love, or at least respect, and it appears there are many chances against her meeting with such a one under favorable circumstances; besides, from all I can hear and see, money seems to be regarded as almost the Alpha and Omega of requisites in a wife. Well, if she is destined to be an old maid I don't think she will be a repining one. I think she will find resources in her own mind and disposition which will help her to get on. As to society, I don't understand much about it, but from the few glimpses I have had of its machinery it seems to me to be a very strange, complicated affair indeed, wherein nature is turned upside down. Your well-bred people appear to me, figuratively speaking, to walk on their heads, to see everything the wrong way up—a lie is with them truth, truth a lie, eternal and tedious botheration is their notion of happiness, sensible pursuits their *cunni*. But this may be only the view ignorance takes of what it cannot understand. I refrain from judging them, therefore, but if I was called upon to *swop*—you know the word I suppose—to swop tastes and ideas and feelings with——for instance, I should prefer walking into a good Yorkshire kitchen fire and concluding the bargain at once by an act of voluntary combustion."

VII.

The reader has seen that it was not the degradation of Branwell Brontë which formed the turning-point in Charlotte's life. Mrs. Gaskell, anxious to support her own conception of what *should have been* Charlotte's feelings with regard to her brother's ruin, has scarcely done justice either to herself or to her heroine. Thus she makes use of a passage in one of the letters quoted in the foregoing chapter, but in doing so omits what are perhaps the most characteristic words in it. "He" (Branwell) "has written this morning expressing some sense of contrition; . . . but as long as he remains at home I scarce dare hope for peace in the house." This is the form in which the passage appears in the *Biography*, whereas Charlotte had written of her brother's having expressed "contrition for his frantic folly," and of his having "promised amendment on his return." Mrs. Gaskell could not bring herself to speak of such flagrant sins as those of which young Brontë had been guilty under the name of 'folly,' nor

could she conceive that there was any possibility of amendment on the part of one who had fallen so low in vice. Moreover one of her objects was to punish those who had shared the lad's misconduct, and to whom she openly attributed not only his ruin but the premature deaths of his sisters. Thus she felt compelled to take throughout her book a far deeper and more tragic view of this miserable episode in the Brontë story than Charlotte herself took. Having read all her letters written at this period of her life to her two most confidential friends, I am justified in saying that the impression produced on Charlotte by Branwell's degrading fall was not so deep as that which was produced on Mrs Gaskell, who never saw young Brontë, by the mere recital of the story. Yet Charlotte, though too brave, healthy, and reasonable in all things to be utterly weighed down by the fact that her brother had fallen a victim to loathsome vice, was far from being insensible to the sadness and shamefulfulness of his condition. What she thought of it she has herself told the world in the story of *The Professor* (p. 198):—

"Limited as had yet been my experience of life, I had once had the opportunity of contemplating near at hand an example of the results produced by a course of interesting and romantic domestic treachery. No golden halo of fiction was about this example; I saw it bare and real, and it was very loathsome. I saw a mind degraded by the practice of mean subterfuge, by the habit of perfidious deception, and a body depraved by the infectious influence of the vice-polluted soul. I had suffered much from the forced and prolonged view of this spectacle; those sufferings I did not now regret, for their simple recollection acted as a most wholesome antidote to temptation. They had inscribed on my reason the conviction that unlawful pleasure, trenching on another's rights, is delusive and envenomed pleasure—its hollowness disappoints at the time, its poison cruelly tortures afterwards, its effects deprave for ever."

Upon the gentle and sensitive mind of Anne Brontë the effect of Branwell's fall were such as Mrs. Gaskell depicts. She was literally broken down by the grief she suffered in seeing her brother's ruin; but Charlotte and Emily were of stronger fibre than their sister, and their predominant feeling, as expressed in their letters, is one of sheer disgust at their brother's weakness, and of indignation against all who had in any way assisted in his downfall. This may not be

consistent with the popular conception of Charlotte's character, but it is strictly true.

We must then dismiss from our minds the notion that the brother's fate exercised that paramount influence over the sisters' lives which seems to be believed. Yet as we have seen there was a very strong, though hidden influence working in Charlotte during those years in which their home was darkened by Branwell's presence. Her yearning for Brussels, and the life that now seemed like a vanished dream, continued almost as strong as ever. At Haworth everything was dull, commonplace, monotonous. The school-keeping scheme had failed; poverty and obscurity seemed henceforth to be the appointed lot of all the sisters. Even the resource of intercourse with friends was almost entirely cut off; for Charlotte could not bear the shame of exposing the prodigal of the family to the gaze of strangers. It was at this time, and in the mood described in the last letter quoted in the preceding chapter, that she took up her pen and sought to escape from the narrow and sordid cares which environed her by a flight into the region of poetry. She had been accustomed from childhood to write verses, few of which as yet had passed the limits of mediocrity. Now, with all that heart-history through which she had passed at Brussels weighing upon her, she began to write again, moved by a stronger impulse, stirred by deeper thoughts than any she had known before. In this secret exercise of her faculties she found relief and enjoyment; her letters to her friend showed that her mind was regaining its tone, and the dreary outlook from "the hills of Judæa" at Haworth began to brighten. It was a great day in the lives of all the sisters when Charlotte accidentally discovered that Emily also had dared to "commit her soul to paper." The younger sister was keenly troubled when Charlotte made the discovery, for her poems had been written in absolute secrecy. But mutual confessions hastened her reconciliation. Charlotte produced her own poems, and then Anne also, blushing as was her wont, poured some hidden treasures of the same kind into the eldest sister's lap. So it came to pass that in 1846, unknown to their nearest friends, they presented to the world—at their own cost and risk,

poor souls!—that thin volume of poetry "by Currer, Ellis, and Acton Bell," now almost forgotten, the merits of which few readers have recognized and few critics proclaimed.

Strong, calm, sincere, most of these poems are; not the spasmodic or frothy outpourings of Byron-stricken girls; not even mere echoes, however skilful, of the grand music of the masters. When we dip into the pages of the book we see that these women write because they feel. They write because they have something to say; they write not for the world, but for themselves, each sister wrapping her own secret within her own soul. Strangely enough it is not Charlotte who carries off the palm in these poems. Verse seems to have been too narrow for the limits of her genius; she could not soar as she desired to do within the self-imposed restraints of rhythm, rhyme and metre. Here and there, it is true, we come upon lines which flash upon us with the brilliant fire of genius; but upon the whole we need not wonder that Currer Bell achieved no reputation as a poet. Nor is Anne to be counted among great singers. Sweet indeed her verses are, radiant with the tenderness, resignation, and gentle humility which were the prominent features of her character. One or two of her little poems are now included in popular collections of hymns used in Yorkshire churches; but as a rule her compositions lack the vigorous life which belongs to those of her sisters. It is Emily who takes the first place in this volume. Some of her poems have a lyrical beauty which haunts the mind ever after it has become acquainted with them; others have a passionate emphasis, a depth of meaning, an intensity and gravity which are startling when we know who the singer is, and which furnish a key to many passages in *Wuthering Heights* which the world shudders at and hastily passes by. Such lines as these ought to make the name of Emily Brontë far more familiar than it is to the students of our modern English literature:—

"Death! that struck when I was most con-
fiding
In my certain faith of joy to be—
Strike again, Time's withered branch
dividing
From the fresh root of Eternity!

"Leaves upon Time's branch were growing
brightly,
Full of sap and full of silver dew;
Birds beneath its shelter gathered nightly;
Daily round its flowers the wild bees flew.

"Sorrow passed, and plucked the golden
blossom;
Guilt stripped off the foliage in its pride;
But within its parent's kindly bosom
Flowed for ever Life's restoring tide.

"Little mourned I for the parted gladness,
For the vacant nest and silent song—
Hope was there, and laughed me out of
sadness;
Whispering, 'Winter will not linger
long!'

"And behold! with tenfold increase blessing,
Spring adorned the beauty-burdened
spray;
Wind and rain and fervent heat, caressing,
Lavished glory on that second May!

"High it rose—no winged grief could sweep
it;
Sin was scared to distance with its slime;
Love, and its own life, had power to keep it
From all wrong—from every blight but
thine;

"Cruel Death! The young leaves droop and
languish;
Evening's gentle air may still restore—
No! the morning sunshine mocks my
anguish—
Time, for me, must never blossom more!

"Strike it down, that other boughs may
flourish
Where that perished sapling used to be;
Thus at least its mouldering corpse will
nourish
That from which it sprang—Eternity!"

The little book was a failure. This first flight ended only in discomfiture; and Currer, Ellis, and Acton Bell were once more left to face the realities of life in Haworth parsonage, uncheered by literary success. This was in the summer and autumn of 1846; about which time they were compelled to think of cares which came even nearer home than the failure of their volume of poems. Their father's eyesight was now almost gone, and all their thoughts were centred upon the operation which was to restore it. Yet at the very time when they were thus beset by bitter anxieties they were engaged in another and more important literary venture. The pen once taken up could not be laid down. By poetry they had only lost money; but the idea had occurred to them that by prose-

writing money was to be made. At any rate in telling the stories of imaginary people, in opening their hearts freely upon all those subjects on which they had thought deeply in their secluded lives, they would find relief from the solitude of Haworth. Each of the three accordingly began to write a novel. The stories were commenced simultaneously, after a long consultation, in which the outlines of the plots, and even the names of the different characters, were settled. How one must wish that some record of that strange literary council had been preserved! Charlotte, in after life, spoke always tenderly, lovingly, almost reverentially, of the days in which she and her well-beloved sisters were engaged in settling the plan and style of their respective romances. That time seemed sacred to her, and though she learnt to smile at the illusions under which the work was begun, and could see clearly enough the errors and crudities of thought and method which all three displayed, she never allowed any one in her presence to question the genius of Emily and Anne, or to ridicule the prosaic and business-like fashion in which the novel-writing was undertaken by the three sisters. Returning to the old customs of their childhood, they sat round the table of their sitting-room in the parsonage, each busy with her pen. No trace of their occupation at this time is to be found in their letters, and on the rare occasions on which the father or the brother came into their room, nothing was said as to the work that was going on. The novel-writing, like the writing and publishing of the poems, was still kept profoundly secret. "There is no gentleman of the name in this parish," said Mr. Brontë to the village postman, when the latter ventured to ask who the Mr. Currer Bell could be for whom letters came so frequently from London. But every night the three sisters, as they paced the barely-furnished room, or strained their eyes across the tombstones, to the spot where the weather-stained church tower rose from a bank of nettles, told each other what the work of the day had been, and criticised each other's labors with the freedom of that perfect love which casts out all fear of misconception. Is it needful to tell how the three stories—*The Professor*, *Wuth-*

ering Heights, and *Agnes Grey*—are sent forth at last from the little station at Keighley to fare as best they may in that unknown London which is still an ideal city to the sisters, peopled not with ordinary human beings, but with creatures of some strangely-different order? Can any one be ignorant of the weary months which passed whilst *The Professor* was going from hand to hand, and the stories written by Emily and Anne were waiting in a publisher's desk until they could be given to the world on the publisher's own terms? Charlotte had failed, but the brave heart was not to be baffled. No sooner had the last page of *The Professor* been finished than the first page of *Jane Eyre* was begun. The whole of that wondrous story passed through the author's busy brain whilst the life around her was clad in these sombre hues, and disappointment, affliction, and gloomy forebodings were her daily companions. The decisive rejection of her first tale by Messrs. Smith, Elder, and Co. had been accompanied by some kindly words of advice; so it is to that firm that she now entrusts the completed manuscript of *Jane Eyre*. The result has already been told. On August 24, 1847, the story is sent from Leeds to London; and before the year is out all England is ringing with the praises of the novel and its author.

Need I defend the sisters from the charge sometimes brought against them that they were unfaithful to their friends in not taking them into their confidence? Surely not. They had pledged themselves to each other that the secret should be sternly guarded, as something sacred, kept even from those of their own household. They were not working for fame; for again and again they give proof that personal fame is the last thing to which they aspire. But they had found their true vocation, the call to work was irresistible, they had obeyed it, and all that they sought now was to leave their work to speak for itself, dis-severed absolutely from the humble personality of the authors.

In a letter from Anne Brontë, written in January, 1848, at which time the literary quidnuncs both of England and America were eagerly discussing contradictory theories as to the authorship of *Jane Eyre*, and of the two other stories

which had appeared from the pens of Ellis and Acton Bell, I find the following passage:—"I have no news to tell you, for we have been nowhere, seen no one, and done nothing (to *speak* of) since you were here, and yet we contrive to be busy from morning till night." The gentle and scrupulously conscientious girl, whilst hiding the secret from her friend, cannot violate the truth even by a hairsbreadth. The italics are her own. Nothing *that can be spoken of* has been done. The friend had her own suspicions. Staying in a southern house for the winter, the new novel about which everybody was talking was produced—fresh from town. One of the guests was deputed to read it aloud, and before she had proceeded far Charlotte Brontë's schoolfellow had pierced the secret of the authorship. Three months before, Charlotte had been spending a few days at Miss N——'s house, and had openly corrected the proof-sheets of the story in the presence of her hostess; but she had given the latter no encouragement to speak to her on the subject, and nothing had been said. Now, however, in the surprise of the moment Miss N—— told the company that this must have been written by Miss Brontë, and astute friends at once advised her not to mention the fact that she knew the author of *Jane Eyre* to any one, as her acquaintance with such a person would be regarded as a reflection on her own character! When Charlotte was challenged by her friend, she uttered stormy denials in general terms which carried a complete confirmation of the truth, and when, in the spring of 1848, Miss N—— visited Haworth, full confession was made, and the poems brought forth and shown to her, in addition to the stories.

Very quietly and sedately did "Currer Bell" take her sudden change of fortune. She corresponded freely with her publishers, and with her critics who had written to her concerning her book; she told her father the secret of her authorship, and exhibited to him the draft which was the substantial recompense of her labors; but in her letters to her friend no difference of tone is to be detected. Success was very sweet to her, as we know, but she bore her honors meekly, betraying nothing of the gratified ambition which must have filled her

soul. In truth her thoughts were soon turned from her literary triumph to more pressing matters nearer home. It was after one brief visit to London, accompanied by Anne, to satisfy her publishers that Currer Bell was a distinct individuality not to be confounded with either Ellis or Acton, that she returned home to find that death was setting its seal upon the household. Branwell, who had been so long the dark shadow in their "humble home," was taken from them without any lengthened preliminary warning. Sharing to the full the eccentricity of the family, he resolved to die as nobody else had ever died before, and when the last agony came on, he rose to his feet, as though proudly defying death itself to do its worst, and expired standing. In the following letter, hitherto unpublished, to one of her friends—not to her old schoolfellow—Charlotte thus speaks of the last act in the tragedy of her brother's life:—

"HAWORTH, October 14, 1848.

"The event to which you allude came upon us indeed with startling suddenness, and was a severe shock to us all. My poor brother has long had a shaken constitution, and during the summer his appetite had been diminished and he had seemed weaker, but neither we, nor himself, nor any medical man who was consulted on his case thought it one of immediate danger: he was out of doors two days before his death, and was only confined to bed one single day. I thank you for your kind sympathy. Many, under the circumstances, would think our loss rather a relief than otherwise; in truth, we must acknowledge, in all humility and gratitude, that God has greatly tempered judgment with mercy; but yet, as you doubtless know from experience, the last earthly separation cannot take place between near relations without the keenest pangs on the part of the survivors. Every wrong and sin is forgotten then; pity and grief share the heart and the memory between them. Yet we are not without comfort in our affliction. A most propitious change marked the few last days of poor Branwell's life; his demeanor, his language, his sentiments, were all singularly altered and softened, and this change could not be owing to the fear of death, for within half an hour of his decease he seemed unconscious of danger. In God's hands we leave him! He sees not as man sees. Papa, I am thankful to say, has borne the event pretty well. His distress was great at first. To lose an only son is no ordinary trial. But his physical strength has not hitherto failed him, and he has now in a great measure recovered his mental composure; my dear sisters are pretty well also. Unfortunately illness attacked me

at the crisis, when strength was most needed; I bore up for a day or two, hoping to be better, but got worse; fever, sickness, total loss of appetite and internal pain, were the symptoms. The doctor pronounced it to be bilious fever—but I think it must have been in a mitigated form; it yielded to medicine and care in a few days; I was only confined to my bed a week, and am, I trust, nearly well now. I felt it a grievous thing to be incapacitated from action and effort at a time when action and effort were most called for. The past month seems an overclouded period in my life."

Alas! the brave woman who felt it to be "a grievous thing" that she could not bear her full share of the family burden, little knew how terribly that burden was to be increased, how much heavier and blacker were the clouds which awaited her than any through which she had yet passed. The storm which even then was gathering upon her path was one which no sunshine of fame or prosperity could dissipate. The one to whom Charlotte's heart had always clung most fondly, the sister who had been nearest to her in age and nearest to her in affection, Emily, the brilliant but ill-fated child of genius, began to fade. "She had never," says Charlotte, speaking in the solitude of her fame, "lingered over any task in her life, and she did not linger now." Yet the quick decline of Emily Brontë is one of the saddest of all the sad features of the story. I have spoken of her reserve. So intense was it that when dying she refused to admit even to her own sisters that she was ill. They saw her fading before their eyes; they knew that the grave was yawning at her feet; and yet they dared not offer her any attention such as an invalid needed, and such as they were longing to bestow upon her. It was the cruellest torture of Charlotte's life. During the brief period of Emily's illness, her sister writes as follows to her friend:—

"I mentioned your coming to Emily as a mere suggestion, with the faint hope that the prospect might cheer her, as she really esteems you perhaps more than any other person out of this house. I found, however, it would not do; any, the slightest excitement or putting out of the way, is not to be thought of, and indeed I do not think the journey in this unsettled weather, with the walk from Keighley and back, at all advisable for yourself. Yet I should have liked to see you, and so would Anne. Emily continues much the same: yesterday I thought her a little better, but to-day she is not so well. I hope still,

for I *must* hope; she is as dear to me as life. If I let the faintness of despair reach my heart I shall become worthless. The attack was, I believe, in the first place, inflammation of the lungs; it ought to have been met promptly in time; but she would take no care, use no means, she is too intractable. I *do* wish I knew her state and feelings more clearly. The fever is not so high as it was, but the pain in the side, the cough, the emaciation are there still."

The days went by in the parsonage, slowly, solemnly, each bringing some fresh burden of sorrow to the broken hearts of Charlotte and Anne. Emily's resolute spirit was unbending to the last. Day after day she refused to own that she was ill; refused to take rest or medicine or stimulants; compelled her trembling hands to labor as of old. And so came the bitter morning in December, the story of which has been told by Mrs. Gaskell with simple pathos, when she "arose and dressed herself as usual, making many a pause, but doing everything for herself," even going on with her sewing as at any time during the years past; until suddenly she laid the unfinished work aside, whispered faintly to her sister, "If you send for a doctor I will see him now," and in two hours passed quietly away.

The broken father, supported on either side by his surviving daughters, followed Emily to her grave in the old church. There was one other mourner—the fierce old dog whom she had loved better almost than any other human being.

"Yes," says Charlotte, writing to her friend, "there is no Emily in time or on earth now. Yesterday we put her poor wasted mortal frame quietly under the church pavement. We are very calm at present. Why should we be otherwise? The anguish of seeing her suffer is over. We feel she is at peace. No need now to tremble for the hard frost and the keen wind. Emily does not feel them. She died in a time of promise. We saw her taken from life in its prime. But it is God's will, and the place where she is gone is better than that she has left."

It was in the very month of December, 1848, when Charlotte passed through this fierce ordeal, and wrote these tender words of love and resignation, that the *Quarterly Review* denounced her as an improper woman who "for some sufficient reason" had forfeited the society of her sex!

Terrible was the storm of death which

in three short months swept off two of the little household at Haworth; but it had not even yet exhausted all its fury. Scarcely had Emily been laid in the grave than Anne, the youngest and gentlest of the three sisters, began to fade. Very slowly did she droop. The winter passed away, and the spring came with a glimmer of hope; but the following unpublished letter, written on the 16th of May, shows with what fears Charlotte set forth on that visit to Scarborough which her sister insisted upon undertaking as a last resource:—

"Next Wednesday is the day fixed for our departure; Ellen accompanies us at her own kind and friendly wish. I would not refuse her society, but dared not urge her to go, for I have little hope that the excursion will be one of pleasure or benefit to those engaged in it. Anne is extremely weak. She herself has a fixed impression that the sea-air will give her a chance of regaining strength. That chance therefore she must have. Having resolved to try the experiment, misgivings are useless, and yet when I look at her misgivings will rise. She is more emaciated than Emily was at the very last, her breath scarcely serves her to mount the stairs, however slowly. She sleeps very little at night, and often passes most of the forenoon in a semi-lethargic state. Still she is up all day, and even goes out a little when it is fine. Fresh air usually acts as a temporary stimulus, but its reviving power diminishes."

Just two weeks after this Anne died at Scarborough, rendering up her soul with that sweetness and resignation of spirit which had adorned her throughout her brief life, and even in the last hour crying, "Take courage, Charlotte, take courage," as she bade farewell to the sister who was left.

Before me lie the few letters which remain of Emily and Anne. There is little in them worth preserving. Both make reference to the fact that Charlotte is the great correspondent of the family, and that their brief and uninteresting epistles can have no charm for one who is constantly receiving letters from her. Yet that modest reserve which distinguished the greatest of the three is plainly visible in what little remains of the correspondence of the others. They had discovered before their death the real power that lay within them; they had just experienced the joy which comes from the exercise of these powers; they had looked forward to a future which should be sunny and prosperous,

as no other part of their lives of toil and patient endurance had been. Suddenly death confronted them, and they recognized the fact that they must leave their work undone. Each faced the dread enemy in her own way, but neither shrank even from that blow. Emily's proud spirit refused to be conquered, and, as we have seen, up to the last agony she carried herself as one sternly indifferent to the weaknesses of the flesh, including that final weakness which must conquer all of us in the end. Anne found consolation, pure and deep, in her religious faith, and she died cheerfully in the firm belief that she was but entering upon that fuller life which lay beyond the grave. The one was defiant, the other resigned; but courage and fortitude were shown by each in accordance with her own special idiosyncrasy.

VIII.

Charlotte went back from Scarborough to Haworth alone. Her father met her with unwonted demonstrations of affection, and she "tried to be glad" that she was once more under the familiar roof. "But this time joy was not to be the sensation." Yet the courage which had held her sisters to the end supported her amid the pangs of loneliness and bereavement. Even now there was no bitterness, no morbid gloom in the heart which had suffered so keenly. Setting aside her own sorrow quietly but resolutely, refusing all the invitations of her friend to seek temporary relief in change of scene, she sat down to complete the story which was intended to tell the world what the lost Emily had seemed to be in the eyes of her fond sister. By herself, in the room in which a short year ago three happy sisters had worked together, within the walls which could never again echo with the old voices, or walking on the moors, which would never more be trodden by the firm, elastic step of Emily, she composed the brilliant story of *Shirley*—the brightest and healthiest of her works. As she writes she sometimes sends forth messages to those who love her, which tell us of the spirit of the hero or the martyr burning within the frail frame of the solitary woman. "Submission, courage, exertion when practicable, these seem to be the weapons with which we must fight life's

long battle"; and that these are no mere words she proves with all her accustomed honesty and sincerity, by acting up to them to the very letter. But at times the burden presses upon her till it is almost past endurance. Strangely enough, it is a comparative trifle, as the world counts it, the illness of a servant, that occasions her fiercest outburst of open grief:—

"You have to fight your way through labor and difficulty at home, it appears, but I am truly glad now you did not come to Haworth. As matters have turned out you would have found only discomfort and gloom. Both Tabby and Martha are at this moment ill in bed. Martha's illness has been most serious. She was seized with internal inflammation ten days ago; Tabby's lame leg has broken out, she cannot stand or walk. I have one of Martha's sisters to help me, and her mother comes up sometimes. There was one day last week when I fairly broke down for ten minutes, and sat down and cried like a fool. Martha's illness was at its height; a cry from Tabby had called me into the kitchen, and I had found her laid on the floor, her head under the kitchen-grate. She had fallen from her chair in attempting to rise. Papa had just been declaring that Martha was in imminent danger; I was myself depressed with headache and sickness that day; I hardly knew what to do or where to turn. Thank God, Martha is now convalescent; Tabby, I trust, will be better soon. Papa is pretty well. I have the satisfaction of knowing that my publishers are delighted with what I sent them—this supports me, but life is a battle. May we *all* be enabled to fight it well."

This letter is dated September 24, 1849, at which time *Shirley* is written, and in the hands of her publishers. She has painted the character of Emily in that of Shirley herself; and her friend Ellen is shadowed forth to the world in the person of Caroline Helston. When the book, with its vivid pictures of Yorkshire life at the beginning of the century, and its masterly sketches of characters as real as those which Shakespeare brings upon the stage, is published, there is but one outcry of praise, even from the critics who were so eager to condemn *Jane Eyre*. Up to this point she had preserved her anonymity, but now she is discovered, and her admirers in London persuade her at last to visit them, and make acquaintance with her peers in the Republic of Letters, the men and women whose names were household words in Haworth Parsonage long before "Curre-

Bell" had made her first modest appeal to the world.

A passage from one of the following letters, written during this first sojourn in London, has already been published; but it will well bear reprinting:—

"December, 1849.

"I have just remembered that as you do not know my address you cannot write to me till you get it. I came to this big Babylon last Thursday, and have been, in what seems to me, a sort of whirl ever since; for changes, scenes, and stimulus which would be a trifle to others are much to me. I found when I mentioned to Mr. — my plan of going to Dr. —'s, it would not do at all. He would have been seriously hurt: he made his mother write to me, and thus I was persuaded to make my principal stay at his house. So far I have found no reason to regret this decision. Mrs. — received me at first like one who has had the strictest orders to be scrupulously attentive. I had fire in my bedroom evening and morning, two wax candles, &c., and Mrs. — and her daughters seemed to look on me with a mixture of respect and alarm. But all this is changed; that is to say, the attention and politeness continue as great as ever, but the alarm and estrangement are quite gone; she treats me as if she liked me, and I begin to like her much. Kindness is a potent heart-winner. I had not judged too favorably of — on a first impression—he pleases me much: I like him better as a son and brother than as a man of business. Mr. W— too is really most gentlemanly and well-informed; his weak points he certainly has, but these are not seen in society. Mr. X— (the little man) has again shown his parts. Of him I have not yet come to a clear decision. Abilities he has, for he rules his firm and keeps forty young men under strict control by his iron will. His young superior likes him, which, to speak the truth, is more than I do at present. In fact I suspect he is of the Helston order of men, rigid, despotic, and self-willed. He tries to be very kind, and even to express sympathy sometimes, and he does not manage it. He has a determined, dreadful nose in the middle of his face, which when poked into my countenance cuts into my soul like iron. Still he is horribly intelligent, quick, searching, sagacious, and with a memory of relentless tenacity: to turn to — after him is to turn from granite to easy down or warm fur. I have seen Thackeray."

"As to being happy, I am under scenes and circumstances of excitement, but I suffer acute pain sometimes—mental pain, I mean. At the moment Mr. Thackeray presented himself I was thoroughly faint from inanition, having eaten nothing since a very slight breakfast, and it was then seven o'clock in the evening. Excitement and exhaustion together made savage work of me that evening. What he thought of me, I cannot tell. This evening I am going to meet Miss Martineau—she has written to me most kindly

—she knows me only as Currer Bell—I am going alone—how I shall get on I do not know. If Mrs. — were not kind, I should sometimes be miserable; but she treats me almost affectionately, her attentions never flag. I have seen many things; I hope some day to tell you what. Yesterday I went over the new Houses of Parliament with Mr. —. An attack of rheumatic fever has kept poor Mr. X— out of the way since I wrote last. I am sorry for *his* sake. It grows quite dark. I must stop. I shall not stay in London a day longer than I first intended. On those points I form my resolutions, and will not be shaken. The thundering *Times* has attacked me savagely."

The following letters (with one exception not previously published) belong to the spring of 1850, when Charlotte was at home again, engaged in attending to her father and to the household cares which shared her attention with literary work and anxieties. The first, which refers exclusively to her visit to London, was addressed to one of her old friends in Yorkshire:—

"Ellen it seems told you that I spent a fortnight in London last December. They wished me very much to stay a month, alleging that I should in that time be able to secure a complete circle of acquaintance; but I found a fortnight of such excitement quite enough: the whole day was usually devoted to sight-seeing, and often the evening was spent in society: it was more than I could bear for any length of time. On one occasion I met a party of my critics—seven of them. Some of them had been my bitter foes in print, but they were prodigiously civil face to face. These gentlemen seemed infinitely grander, more pompous, dashing, showy than the few authors I saw. Mr. Thackeray, for example, is a man of very quiet simple demeanor; he is however looked upon with some awe and even distrust. His conversation is very peculiar, too perverse to be pleasant. It was proposed to me to see Charles Dickens, Lady Morgan, Mesdames Trollope, Gore, and some others; but I was aware these introductions would bring a degree of notoriety I was not disposed to encounter; I declined therefore with thanks. Nothing charmed me more during my stay in town than the pictures I saw; one or two private collections of Turner's best water colors were indeed a treat. His later oil paintings are strange things—things that baffle description. I have twice seen Macready act, once in *Macbeth* and once in *Othello*. I astounded a dinner party by honestly saying I did not like him. It is the fashion to rave about his splendid acting; anything more false and artificial, less genuinely impressive than his whole style, I could scarcely have imagined. The fact is the stage system altogether is hollow nonsense. They act farces well enough; the actors comprehend their parts and do them justice. They com-

prehend nothing about tragedy or Shakespeare, and it is a failure. I said so, and by so saying produced a blank silence, a mute consternation. I was indeed obliged to dissent on many occasions, and to offend by dissenting. It seems now very much the custom to admire a certain wordy, intricate, obscure, style of poetry, such as Elizabeth Barrett Browning writes. Some pieces were referred to, about which Currer Bell was expected to be very rapturous, and failing in this, he disappointed. London people strike a provincial as being very much taken up with little matters, about which no one out of particular town circles cares much. They talk, too, of persons, literary men and women, whose names are scarcely heard in the country, and in whom you cannot get up an interest. I think I should scarcely like to live in London, and were I obliged to live there I should certainly go little into company—especially I should eschew the literary critics."

"I have, since you went, had a remarkable epistle from Thackeray, long, interesting, characteristic; but it unfortunately concludes with the strict injunction, *Show this letter to no one*. Adding that if he thought his letters were seen by others, he should either cease to write, or write only what was conventional. But for this circumstance I should have sent it with the others. I answered it at length. Whether my reply will give satisfaction or displeasure remains yet to be ascertained. Thackeray's feelings are not such as can be gauged by ordinary calculation: variable weather is what I should ever expect from that quarter. Yet in correspondence, as in verbal intercourse, this would torment me."

"I believe I should have written to you before but I don't know what heaviness of spirit has beset me of late, made my faculties dull, made rest weariness, and occupation burdensome. Now and then the silence of the house, the solitude of the room has pressed on me with a weight I found it difficult to bear, and recollection has not failed to be as alert, poignant, obtrusive, as other feelings were languid. I attribute this state of things partly to the weather. Quicksilver invariably falls low in storms and high winds, and I have ere this been warned of approaching disturbance in the atmosphere by a sense of bodily weakness, and deep, heavy mental sadness, which some would call *presentiment*. Presentiment indeed it is, but not at all supernatural. The Haworth people have been making great fools of themselves about *Shirley*, they take it in the enthusiastic light. When they got the volumes at the Mechanics' Institution, all the members wanted them; they cast lots for the whole three, and whoever got a volume was only allowed to keep it two days and to be fined a shilling *per diem* for longer detention. It would be mere nonsense and vanity to tell you what they say. I have had no letters from London for a long time, and am very much ashamed of myself to find, now when that stimulus is withdrawn, how dependent upon it I had become. I cannot help feeling something of the excitement of expectation till

post-hour comes, and when day after day it brings nothing, I get low. This is a stupid, disgraceful, unmeaning state of things. I feel bitterly enraged at my own dependence and folly. It is so bad for the mind to be quite alone, to have none with whom to talk over little crosses and disappointments, and laugh them away. If I could write I dare say I should be better, but I cannot write a line. However (D.V.) I shall contend against the idiosyncrasy. I had rather a foolish letter from Miss — the other day. Some things in it nettled me, especially an unnecessarily earnest assurance that in spite of all I had gone and done in the writing line I still retained a place in her esteem. My answer took strong and high ground at once. I said I had been troubled by no doubts on the subject, that I neither did myself nor her the injustice to suppose there was anything in what I had written to incur the just forfeiture of esteem. I was aware, I intimated, that some persons thought proper to take exceptions at *Jane Eyre*, and that for their own sakes I was sorry, as I invariably found them individuals in whom the animal largely predominated over the intellectual, persons by nature coarse, by inclination sensual, whatever they might be by education and principle."

"I inclose a slip of newspaper for your amusement. Me it both amused and touched, for it alludes to some who are in this world no longer. It is an extract from an American paper, and is written by an emigrant from Haworth. You will find it a curious mixture of truth and inaccuracy. Return it when you write again. I also send you for perusal an opinion of *Jane Eyre*, written by a *working-man* in this village; rather, I should say, a record of the feelings the book excited in the poor fellow's mind; it was not written for my inspection, nor does the writer now know that his little document has by intricate ways come into my possession, and I have forced those who gave it to promise that they will never inform him of this circumstance. He is a modest, thoughtful, feeling, reading being, to whom I have spoken perhaps about three times in the course of my life; his delicate health renders him incapable of hard or close labor; he and his family are often under the pressure of want. He feared that if Miss Brontë saw what he had written, she would laugh it to scorn. But Miss Brontë considers it one of the highest, because one of the most truthful and artless tributes her work has yet received. You must return this likewise. I do you great honor in showing it to you."

Once more we can see that the healthy, happy interest she takes in the welfare of others is beginning to assert itself. For a time, under the keen smart of the wounds death had inflicted on her, she had found little heart to discuss the affairs of her circle of friends in her correspondence; but now the outer world vindicates its claim to her renewed at-

tention, and she again begins to discuss and analyse the characters of her acquaintances with a skill and minuteness which make them as interesting even to strangers as any of the most closely-studied characters of fiction can be.

"I return Q—'s letter. The business is a most unpleasant one to be concerned in. It seems to me *now* altogether unworthy in its beginning, progress, and ending. Q— is the only pure thing about it; she stands between her coarse father and cold, unloving suitor, like innocence between a pair of world-hardened knaves. The comparison seems rather hard to be applied to V—, but as I see him now he merits it. If V— has no means of keeping a wife, if he does not possess a sixpence he is sure of, how can he think of marrying a woman from whom he cannot expect she should work to keep herself? V—'s want of candor, the twice-falsified account he gave of the matter, tells painfully and deeply against him. It shows a glimpse of his hidden motives such as I refrain from describing in words. After all he is perhaps only like the majority of men. Certainly those men who lead a gay life in their youth, and arrive at middle life with feelings blunted and passions exhausted, can have but one aim in marriage—the selfish advancement of their interest. And to think that such men take as wives—as second selves—women young, modest, sincere, pure in heart and life, with feelings all fresh and emotions all unworn, and bind such virtue and vitality to their own withered existence, such sincerity to their own hollowness, such disinterestedness to their own haggard avarice! to think this, troubles the soul to its inmost depths. Nature and justice forbid the bans of such wedlock. This note is written under excitement. Q—'s letter seems to have lifted so fraudulent a veil, and to show both father and suitor lurking behind in shadow so dark, acting from motives so poor and low, so conscious of each other's littleness, and consequently so destitute of mutual respect! These things incense me, but I shall cool down."

"I cannot find your last letter to refer to, and therefore this will be no answer to it. You must write again, by return of post if possible, and let me know how you are progressing. What you said in your last confirmed my opinion that your late attack had been coming on for a long time. Your wish for a cold water bath, &c., is, I should think, the result of fever. Almost every one has complained lately of some tendency to slow fever. I have felt it in frequent thirst and in frequent appetite. Papa too, and even Martha, have complained. I fear this damp weather will scarcely suit you; but write and say all. Of late I have had many letters to answer; and some very bothering ones from people who want opinions about their books, who seek acquaintance, and who flatter to get it; people who utterly mistake all about me. They are most difficult to answer, put off, and appease, without offending; for such characters

are excessively touchy, and when affronted turn malignant. Their books are too often deplorable."

In June, 1850, she is induced to pay another visit to London, going upon this occasion whilst the season is at its height, though she has stipulated before going that she is "not to be lionized."

"I came to London last Thursday. I am staying at —. Here I feel very comfortable. Mrs. — treats me with a serene, equable kindness which just suits me. Her son is as before—genial and friendly. I have seen very few persons, and am not likely to see many, as the agreement was that I was to be very quiet. We have been to the exhibition of the Royal Academy, to the opera, and the Zoological Gardens. The weather is splendid. I shall not stay longer than a fortnight in London; the feverishness and exhaustion beset me somewhat, but I think not quite so badly as before—as indeed I have not yet been so much tired."

"I am leaving London if all be well on Tuesday, and shall be very glad to come to you for a few days if that arrangement still remains convenient to you. My London visit has much surpassed my expectations this time. I have suffered less, and enjoyed more than before; rather a trying termination yet remains to me. Mrs. —'s youngest son is at school in Scotland, and her eldest is going to

fetch him home for the vacation. The other evening he announced his intention of taking one of his sisters with him, and the evening after he further proposed that Miss Brontë should go down to Edinburgh and join them there, and see that city and its suburbs. I concluded he was joking, laughed and declined. However, it seems he was in earnest, and being always accustomed to have his will, he brooks opposition ill. The thing appearing to me perfectly out of the question, I still refused, Mrs. — did not at all favor it, but her worthy son only waxed more determined. This morning she came and entreated me to go; G— wished it so much, he had begged her to use her influence, &c., &c. Now, I believe that he and I understand each other very well, and respect each other very sincerely. We both know the wide breach time has made between us. We do not embarrass each other, or very rarely. My six or eight years of seniority, to say nothing of lack of all pretensions to beauty, &c., are a perfect safeguard. I should not in the least fear to go with him to China. I like to see him pleased. I greatly dislike to ruffle and disappoint him; so he shall have his mind, and if all be well I mean to join him in Edinburgh, after I have spent a few days with you. With his buoyant animal spirits and youthful vigor he will make severe demands on my muscles and nerves; but I daresay I shall get through somehow."

Macmillan's Magazine.

(To be continued.)

THE ASTRONOMY OF THE FUTURE. A SPECULATION.

BY NEWTON CROSLAND.

We venture to express an opinion that popular knowledge on the subject of Astronomy is still in a very old-fashioned, conventional, Newtonian condition. Men are still too apt to allow themselves to be guided by the literal evidence of their senses and the superficial appearances of things, a misleading condition and influence against which it is the purpose of true philosophy to guard our minds. Modern ideas in chemistry and electricity are, moreover, necessary; for one form of science cannot afford to dispense with the aid and illumination of another.

In manuals of astronomy our youth are taught that the Sun is a dark globe inclosed in a photosphere or luminous envelope, partly composed of divers metals in a state of intense incandescence and of gases blazing away furiously. We are told that observers can really see the surface of this 'luminary,' in a terri-

ble condition of turbulent combustion that the vapor of molten metals can be detected in its rays, and that its light and heat have been calculated to a mechanical nicety, almost as far as figures can be conceived by the ordinary human mind. It has also been made a subject of estimate how long the Sun can exist at its present rate of combustion and self-consumption, as this 'central fire' of the solar system is said to give out in each second of time heat equivalent to that produced by the burning of eleven thousand six hundred millions of millions of tons of coal! We are also told that the incandescent metals in the Sun, revealed by the spectroscope, differ from what is apparent in the light of the stars. We do not doubt the existence of the phenomena so clearly shown by scientific men, but we are tempted to dissent from the conclusions deduced; and we think the time has arrived when the notions

which have been so systematically repeated to us should be thoroughly re-examined, and, we are inclined to say, discarded.

In this essay, 'we merely propose to draw the outlines of what appears to us to be in an improved system; and though other writers, unknown to us, may have anticipated most of our views, our doctrines will be none the worse if they are proved not to be novel.

The version of astronomical phenomena which has hitherto been given to us may possibly turn out to be a huge menagerie of scientific bugbears, calculated to astonish and fascinate the imaginations and wonderment of simple-minded, credulous students. Let us beware of scientific superstition; it is as fruitful a source of error as that which claims a bastard relationship to religion.

In its revelations of the organisation of the Sun, science plumes itself upon its capacity of triumphantly disclosing and demonstrating the secrets, methods, and laws which underlie the grand aspects and mysteries of nature. Is this boast justifiable? What do we really know of the Sun? and are our scientific guides and explorers thoroughly correct in all the information they deal out to us? In opposition to the generally received theory, would our readers 'be surprised to hear' that the Sun is not necessarily luminous; and that beyond the range of our atmosphere he is possibly cold and dark, and would there be invisible? At a first glance this statement is, perhaps, startling.

But if we suppose the Sun and stars to be gigantic fountains of magnetic influence, centres of polarised force—attraction and repulsion—acting upon our globe and its atmosphere, and likewise upon all the other planets, the phenomena of the universe would then become susceptible of the grandest and simplest interpretation.

To explain the effects of the Sun there is not the least reason to infer that it is itself luminous or even warm. It may be one of the sources of heat without being itself hot, as heat is doubtless the product of combined influences. This opinion may be elucidated by an example. Take a galvanic battery, which is a dark, cold machine; introduce a little acidified water into its cells and set it

in action; by a proper arrangement of wires you may at a long distance from your battery produce a heat intense enough to fuse the hardest metals, and a light too vivid to be endured by the human eye. Now, if, while this result is being accomplished, we could see with enhanced powers of vision the action of the dilute acid on the metal plates of the galvanic battery, we should discover on their surface a process of rapid oxidation going on analogous on a small scale to the commotion apparent on the face of the Sun, which phenomenon might easily be mistaken for violent combustion, and which in fact, judging by the impression made on the senses, could not readily be conceived to be anything else.

Thus we learn that potent action generated in a dark, cold body may produce great light and heat at a distance from the seat of activity; and what is thus wrought artificially in a small way by a galvanic battery may surely be done naturally, in a tremendous fashion, by the grand forces of the Sun.

When we gaze on Mont Blanc at sunset, if our judgment were left to the untrained evidence of our senses, we might easily be led to believe that summit of the mountain to be a luminous and incandescent pinnacle, passing through all the hues of the solar spectrum, and finally disappearing in a ghostly white; but knowledge and experience tell us a different tale and correct our inferences. We ascend the mountain, and we find a cold cone of snow!

The appearance of Mont Blanc presented under this aspect is, however, so far distinct from that exhibited by the Sun, that the sunset brightness of Mont Blanc is a vision of momentarily-born illusion, whereas the light of the Sun is the result of intense action and conversion of substance on its surface, and necessarily an originating force.

In estimating the power, quantity, and durability of the light and heat of the Sun, we must first know where the light and heat begin their evolution. If they are a production bred in our atmosphere by the magnetic action of the Sun, and the Sun is only one of their causes, we must draw very different conclusions respecting the attributes of light and heat than if we credited the Sun with the sole responsibility of their origin.

The intense magnetic action of the Sun may present on its surface and in its rays all the appearance of incandescence, when it is rendered visible here by means of our atmosphere and examined by instruments constructed for the detection of solar and astral phenomena.

About the beginning of this century the celebrated French philosopher Biot produced light by passing a current of electricity through air or a gas. Is it not a reasonable inference that the Sun does not waste light and heat—diminishing as the square of the distance—through a space of ninety millions of miles between us and itself, when by the means of ethereal and atmospheric conditions the requisite quantity of light and heat might so easily be distributed at the precise spots where it is needed? With the conditions that surround us on this earth, we cannot artificially produce light and heat without the destruction of some material substance; but we are not driven to assume that the same conditions prevail naturally in the Sun; and even if a process of self-consumption were continually going on in that body, we are equally justified in drawing the inference that it possesses some infinite means and capacity of self-repair. We think, therefore, that we can naturally account for all the phenomena of heat and light and the appearance of incandescence and flame on the surface of the Sun, without resorting to the tremendous theory that the Sun is actually in a state of combustion as understood in our terrestrial experience.

Upon this theory that the Sun has the power of distributing sufficient light and heat to the various planets according to the nature of their atmospheric conditions, the doctrine which has been taught about Mercury being as hot as a furnace and Saturn as cold as an iceberg, may in future be received with a smile of incredulity.

It is one thing to observe phenomena accurately, and quite another thing to reason about them correctly. In spite of all our boasted astronomical discoveries, our certain knowledge of the celestial machinery is really limited to ascertaining the motion of our globe in relation to the motions of other heavenly bodies. After some thousands of years of observation we have learnt only the

rate at which we are moving through space. Our science of the universe is merely a science of motion—that and nothing more!

And here we may appropriately inquire whether we really know anything about the cause of the motion of the heavenly orbs. The old-fashioned theory of the centripetal and centrifugal forces does not appear to answer this question satisfactorily; and we therefore venture to propose as a substitute what we may term the 'Polarity of the Universe,' as a more sufficient and efficient explanation of the movements of the solar system. By 'Polarity' we mean the power of electricity manifested in attraction and repulsion, viz. the attraction which exists between positive and negative poles, and the repulsion which is exhibited when two positive or two negative poles are presented to each other. If we can successfully apply this theory of polarity to the phenomena of the motions of the solar system, we shall in future be required to teach that the rotation of the planets on their axes is caused by currents of electricity and magnetism; and that the revolutions of the planets round the Sun are produced and maintained by these bodies constantly presenting in a slanting direction their opposite or similar poles, and thus gradually and alternately attracting and repelling each other, and keeping up continued movement, necessarily varied in distance and rapidity.

According to this theory, there is no fear of two heavenly bodies coming into collision in space, unless their opposite poles happened to meet, and even then they would probably cling together without doing much damage, until some rival influence separated them and sent each on its natural course; but the active motion of two such bodies would, most probably, always prevent that steadiness of approach necessary to insure cohesion.

In propounding this system, are we not flying in the face of the greatest philosopher that ever lived—Sir Isaac Newton? Let us examine this question briefly but attentively. It is no reflection upon Sir Isaac Newton, one of the most renowned men of all time, that he did not invent a hundred and fifty years ago a theory for which all the elements

did not then exist. If he lived now, he would doubtless choose by the light of modern science a different vocabulary. 'Gravitation' is merely a word expressive of an idea used to interpret a certain class of phenomena, some of which can now be better explained by the aid of more developed ideas, and a more true and refined nomenclature.

The method adopted by Sir Isaac Newton in demonstrating the theory of universal gravitation was very grand and simple; and it was soon received admiringly by the whole world. The explanation may be found in any text-book on the subject, but we may as well reproduce it in an elementary manner. It had been previously proved that on our earth the so-called force of gravity acts inversely as the square of the distance; and it was inferred that if this force extended throughout the solar system, the phenomena it caused and presented in the movements of the moon ought to correspond with what was known of its action on the earth. The lunar observations made and supplied by Flamsteed enabled Newton to put this theory to the test with a triumphant result. By a series of masterly calculations, he demonstrated that the versed sine of an arc of the moon's orbit agreed exactly with the distance which the moon would travel if she were left entirely to the action of gravitation only: that is to say, that the power of gravity at the distance of the moon would be about 3,600 times less than at the surface of the earth. The distance of the moon from the earth's centre is about 60 times the earth's radius, and as the square of this distance is 60 times 60, or 3,600, a body near the earth ought to fall in one minute 3,600 times farther than the length of the versed sine of an arc described by the moon in its orbit in the same time. Nothing could be more beautiful and conclusive than this proof of the correspondence of fact with theory; but it does not in any way interfere with the introduction of Polarity as an explanation of the cause of the revolutions of the heavenly bodies; because we know that all the great forces of nature—light, heat, gravitation, electricity, magnetism—are regulated by the same law, viz. that their power acts [inversely as the square of the distance, subject of course

to the variability of conditions, for conditions modify the action of laws. In our proposed system we can therefore accept Newton's demonstration of universal gravitation, and treat it as the discovery of one mode of Polarity. As the action of gravity is the same as that of Polarity in one direction, we may still conveniently use the word 'gravitation' to express this aspect of Polarised force; but as gravity causes motion in only one direction—the centripetal—it is, of course, insufficient to explain the revolutions of the planets without resorting to the theoretical addition of another force, which was named the centrifugal, the existence of which could only be accounted for by supposing that it was derived from the original impulse or *primum mobile* given to these heavenly bodies at their creation, and since sustained by the hand of the Creator.

The substitution of the terms 'electrical attraction' and 'repulsion' for 'centripetal' and 'centrifugal forces,' may therefore be recommended as conveying a clearer theory of the revolution of the planets for the following reasons: It is evident that this centrifugal force must soon expire unless it is fed from some central exhaustless power, and the supporters of this idea do not supply us with a sufficient cause for the continued sustenance of the centrifugal force, unless it be traceable to the direct power of the Almighty. The introduction of the Creator into this stage of the *modus operandi* of nature is, however, unphilosophical; as we have no right in a scientific explanation to balance one force against another, and call one of them the fiat of the Creator, as we are bound to believe that in the beginning all forces were created by Him. In fact, this style of theorising must be temporary, and is simply a mode of concealing our ignorance. But if we resort to electricity with its attraction and repulsion—in a word, Polarity—as offering an explanation of the motions of the universe, we fancy that we present a theory which is at once comprehensive and scientific. The correctness of this interpretation is supported, as far as can reasonably be looked for, by mechanical contrivances. The process here advocated has been actually shown in a working model. An electrical orrery has been constructed

which, by the discharge of electricity from points, represents the movement of the earth round the Sun, and that of the moon round the earth, with the most surprising completeness.

The movements of the moon have, however, not yet been reduced to mathematical order; they exhibit aberrations which the Astronomer Royal has been engaged some years in studying, and his 'theory of the moon' is yet far from complete. If, however, the moon is acting under the influence of Polarity, these irregularities are what we ought to expect, and their satisfactory solution can scarcely be triumphantly sought in the manœuvring of old problems and the marshalling of old laws.

We must, of course, continue to believe and maintain that the various attractions to which we give the names of 'gravity,' 'cohesion,' 'capillary,' are all-important on this earth, and keep everything here in its right place; and that centrifugal force as the product of rotatory machinery has its proper sphere in our mundane science; but we should hesitate before we extended to the universe forces which are not proved to be adequate for the work and purpose ascribed to them. And, in fact, there is no real analogue among our earthly forces to the centrifugality attributed of the planets in their orbits.

On this point we wish to render our argumentative position quite clear to the intelligence of the ordinary reader, to whom we specially address ourselves; and we shall therefore endeavor to work out this problem very distinctly.

The most superficial scholar knows what is the received explanation of the movement of the planets round the Sun, viz. that when the planet is first hurled on its course its tendency is to go in a straight line; but this tendency is arrested by the attraction of gravitation, and the two forces acting in rectangular opposition to each other cause the orb which they control to move in a curve. It was, however, discovered that in practice this curve did not form a perfect circle, but an ellipse, and that the motion of the planet was accelerated in some parts of its orbit when it was nearest the Sun, and retarded when it was farthest from the Sun. The cause of this discrepancy was attributed to the

antagonistic action of the centripetal and centrifugal forces; as the attraction of gravitation, or centripetal force, gradually overcomes the centrifugal, the planet is drawn nearer the Sun and its speed in its orbit accelerated. This acceleration of speed develops an increase of the centrifugal force, or tendency to fly off at a tangent, so that the two forces thus balance themselves, and the integrity of the orbital movement is preserved. This view of the matter is a plausible assumption and is acceptable in the absence of any materials for the construction of a better explanation. We must, however, call attention to the weak spot in this theory. The acceleration of speed is caused by the attraction of gravitation, which is therefore for the time being the dominant power. This increase of velocity is supposed to develop, as a counterpoise, a force so potent in opposition to that which caused it, that this developed force is, in its turn, capable of overcoming that which is primarily the stronger; so that the superior power is supposed to give birth to a force which can govern its parent; and thus cause and effect alternately become the stronger and control each other! The product is supposed to be able to meet the producer on equal terms. What a scene of scientific confusion is here presented to our view! When once gravity begins to overcome a rival force, its career of conquest cannot be arrested except by the arrival and intervention of a third independent power, and the introduction of this third power is not properly and scientifically accounted for under the old system which we are combating. The accelerated speed already alluded to is not such a ruler as we can recognise as an independent potentate. It is, in fact, the creature and subject of the superior force, gravity, and it must become the ally of its monarch; it cannot rebel and join the opposition which has once allowed it to elude the centrifugal grasp.

The advocates of this contradictory system of causation endeavor to reconcile it to our common sense and tempt us into adopting it by resorting to an illustration which, as a comparison, is altogether fallacious. They depict a man whirling round a stone in a sling, and tell us that we have here something

like a representation of a planet moving in its orbit round the Sun. The stone is held in its place by the string—analogue to the attraction of gravitation—and the faster the man whirls round the sling, the more potently is the centrifugal force developed; and when the stone is released, the more violently does it fly off in a straight line. In this object of comparison we must notice that there are three powers present, very unlike in their attributes, viz., the hand of the man governed by his mind, the sling, and the motion of the sling: the sole originating motive-power which pervades and sustains the whole operation is the will-energy of the man; when that is withdrawn, the action ceases. If we could suppose the hand of the Creator at the centre of the solar system, intelligently, actively, and personally employed in regulating and upholding the movements of the planets round the Sun, the comparison with the man-and-sling figure would be fair and complete; but we are bound to raise the fatal objection to this supposition by pointing out that it is not permitted to Science to enter into the presence of the Creator Himself, so as to trace His conduct and examine His actions. The proper office of Sciences is to discover and expound the eternal laws and temporal methods of working with which the Almighty has endowed Nature, and by which her operations are governed. The moment we address ourselves direct to the Creator, we cease to be scientific, and we become theological.

The theory of Polarity as an explanation of the movements of the universe will, we believe, get rid of a great deal of the subtle confusion that has hitherto prevailed; and, we venture to think, will offer for general acceptance something more lucid and philosophical than the old mechanical doctrine of the centripetal and centrifugal forces—a doctrine which appears to us an inadequate explanation of the grand processes to which it is applied. Centrifugal force is the result of a repellent, and not an attractive, power. The existence of this repellent power is not properly accounted for in the Newtonian system; but by the theory of Polarity we acknowledge two forces of equal rank, quality, and might, which are all-sufficient for the work they are appointed to do, and their generator, Electricity, governs them both with requisite supremacy.

If there be any force in what we have put forward, we must considerably modify if not banish the old-fashioned doctrines from our astronomical science, if we would in future associate finer and truer ideas with the subtle powers of the universe, and express in more comprehensive language the sublime order and methods of her working. We cannot, however, by the utmost exercise of human skill, hope to penetrate very far into the mysteries of Nature. Like the Mohammedan Deity, she is covered with seventy thousand veils; after an age of labor, we may succeed in lifting one of these veils, but another appears behind.
—*Fraser's Magazine.*

CARDINAL ANTONELLI.

THE peculiarity of Cardinal Antonelli's career was that he remained a statesman and a diplomatist after the Church for which he schemed had made statesmanship and diplomacy powerless to do her any service. The work of his life was to sustain the Temporal Power of the Pope, and perhaps if he had been Pope instead of Cardinal-Secretary that strange anachronism might have lasted his time. But Pius IX. has been reserved to destroy, by his own hand, an institution which he thinks almost divine. If the Temporal power could have survived the third quarter of the nineteenth

century, it would have been by the exercise of the same gifts that built it up. The Pope should have been a subtle and pliant politician, apt at playing off one secular Power against another, and ready to subordinate purely spiritual considerations to the material necessities of the Holy See. Cardinal Antonelli would have played such a part to perfection, but it was not one that suited Pius IX. He was not only intellectually unfit for it, he was also morally above it. His conception of his office has included a lavish use of secular means, but these means have always been directed to

spiritual ends. If the judicious use of these temporal means involved any postponement of the spiritual end, Pius IX. would have nothing to say to them. It is probable, for instance, that the definition of the Immaculate Conception was exceedingly injurious to the fortunes of the Papacy as a temporal State. If the Pope had been content with the position of his immediate predecessor, he would have had a friend in every European Sovereign, with the exception of the King of Sardinia. They would have seen in him nothing to fear, and much to sympathise with. He would have been the natural representative of a dull, but not unkindly Conservatism, and Governments would have turned to him as the divinely appointed dispenser of cold water to inconvenient ecclesiastical fervors. Instead of this, the Pope has himself set an example of ecclesiastical fervor. All that worldly politicians look most coldly on in their subjects found protection and encouragement at the hands of Pius IX. He was always introducing novelties which, if they were not distinctly offensive to the secular Powers, were at least strange to them, and which led them to view the Pope with the sort of uneasy distrust which Mr. Gladstone has often contrived to excite in certain Liberals. A Pope who could for the first time decree a new dogma of his own motion, and gibbet popular truths and popular fallacies alike in the Syllabus, and end by persuading the Bishops to accept him as infallible, was not a safe ally. His cause might be really identical with that of every other Sovereign, but in that case the more completely the identity could be concealed the better for the other Sovereigns. It was less dangerous to make him the Jonah of monarchical power than to insist on keeping him among the crew.

The interviews between Cardinal Antonelli and his master must often have presented striking examples of playing at cross-purposes. The Cardinal-Secretary could well have understood a policy which made the maintenance of the temporal power its paramount end, and he might even have understood a policy which treated the maintenance of the temporal power as something altogether secondary and subordinate to the aggrandisement of the Pope's spiritual au-

thority. But he may fairly have been puzzled by the curious inconsistency which thought that the Temporal power must be defended to the last, to keep the Pope not a ruler of men but a bishop of souls. Perhaps if it had been his cue to speak plainly, he could sometimes have urged not merely the theoretical incompatibility of the two policies as interpreted by Pius IX., but the actual injury done by one to the other. It can hardly be doubted, for example, that the support which the French Catholic Clergy gave to the Second Empire has been one of the most fertile causes of the profound distrust in which it is now held by the French working-classes. They hate the Church, because the Church was so ready to ally herself with oppressors, and with oppressors who were understood to yield but a partial and perfunctory obedience to her moral code. Consequently, the interests of Catholicism in France, and to that extent the spiritual interests which the Papacy has in charge, have suffered because Napoleon III. was the great champion of the temporal power. Again, the peace of the Church in Germany has been seriously disturbed by the same cause. It is not probable that the Pope foresaw to the full all the suffering he was bringing upon German Catholics, by trying to prove to Prince Bismarck that he would do well to purchase his alliance by the expulsion of the Italian troops from Rome. The Pope did not know with whom he was dealing, and though the letter of the May Laws was not withheld from him even before they were introduced into the Prussian Parliament, he was probably quite unprepared for the determination with which they were carried through, or for the temper which has presided over their execution. Cardinal Antonelli may not have been more far-sighted than his master in these respects, but then he would probably have confessed that his conception of his duty was pretty well exhausted when he had done his best to keep the Pope a temporal prince. It is conceivable, however, that the Cardinal may at one time have encouraged Pius IX. in his determination to treat the temporal power as an indispensable bulwark of his spiritual power, from the mere conviction that if the temporal power were to

go while Pius IX. was comparatively vigorous and open to new ideas, there would be no place left for a Cardinal-Secretary of State. Diplomats get to find a pleasure in keeping up the fabric of which they are the Ministers, quite distinct from any belief they may have of the excellence or permanence of the fabric itself. It is their work, and as such it is dear to them. This was probably Cardinal Antonelli's feeling towards the temporal power, and in this way he may, for purposes of his own, have encouraged the fashion of regarding the temporal power with that strange devotion which with Ultramontanes has almost raised it to the dignity of an article of faith.

The attitude of the Pope towards the Italian Government had for some time back made the Cardinal-Secretary a mere idler. With whom could Antonelli negotiate? Not with the Catholic Powers generally, for they have acquiesced in the aggrandisement of Italy, and have never shown the least inclination to disturb the settlement of 1870. Not with Victor Emmanuel, for all that he can offer is some relaxation of the conditions upon which Italy is willing to make a concordat with the Vatican, and Pius IX. has always refused to recognise the possibility of such a concordat. Cardinal Antonelli was thus reduced to the position of Secretary to a mere pretender. It would be interesting to know whether his Italian acuteness had been convinced that this was the highest function that remained for him to discharge. Did he realise the change that has passed over Europe, and understand that if the Papacy is again to become a power in secular affairs, it must be by a course which looks like an abandonment of them? Probably the habits of a life were too strong for him, and he died

with no conception of an ecclesiastical future which should be anything more than a faint reproduction of the ecclesiastical past. In that case, his absence from the Conclave may have some real influence on the choice of the next Pope. It is scarcely possible that the Cardinals, when they meet to choose a successor to Pius IX., should proceed as though they had only to provide for the devolution on a new Sovereign of the temporal function which preceding Popes have exercised. They will at least see that they have to make their choice between a fresh struggle with an inexorable fortune and a new departure in which the Church shall once more appeal to the classes among which her earliest victories were won. To all appearance, the future of Catholicism as an organised system depends on the decision which the Conclave comes to when this issue is placed before them. On the one side, there is the Roman Catholic Church as it has been for many centuries,—aristocratic, royalist, and secular; on the other side, there is the Roman Catholic Church as it was when it still had the Western world to subdue,—popular, democratic, and spiritual. Placed between such alternatives as this, the late Cardinal-Secretary would have had no difficulty in making up his mind. The possibilities which wait upon the latter course would to him have been the merest dreams. He would not have believed that victory was to be had on such terms; he might even have felt that victory on such terms would not be worth having. His death will remove a great political influence from among the Cardinals, and by that means increase the interest which will attach to the proceedings of the next Conclave.—*The Spectator*.

THE SILENT POOL.

BENEATH the surface of the crystal water
Metallic shines a floor of frosted green;
Uneven, like a depth of emerald lichen,
Thro' ranks of dark weeds gleams its fairy sheen.

Horsetails of varied growth and plumage sombre,
Like ancient warriors in dark armor dight;
Like fair young maidens' arms the prism-hued grass-leaves,
Clinging in fond embrace before the light.

Round and about this Silent Pool the ash-trees
Bend down in thirsty eagerness to drink;
Amid their gray-green leaves show, keenly vivid,
Long feathering laurel-sprays that clothe the brink.

High up in air, some thirty feet or over,
A wild white rose above the footpath clings;
Fearless she clasps a tough, unyielding ash-trunk,
And o'er the Pool gay wreaths of blossom flings.

Idly I drop a pebble in the water,
Each sombre horsetail nods a plumed head;
Like pearl or opal gem, the stone sinks slowly,
Transmuted ere it reach its emerald bed.

Mystic the emerald hue beneath the water,
Weird-like this tint by which the scene is haunted;
Vainly I ask my senses if they wake,
Or is the deep and silent Pool enchanted?

Now as the widening ripple circles shoreward,
The plumed dusky warriors file away;
The slender grass-blades wave bright arms imploring,
Streaking with tender green the grim array.

Leafless, a gaunt-armed giant oak, storm-scathed,
In gnarled bareness overhangs the Pool;
Fantastic show its knotted limbs contorted,
Grotesque and gray among the leafage cool.

Caught here and there amid the feathered foliage
Are glimpses of the far hills' softened blue,
While overhead the clouds, snow-white and fleecy,
Float slowly on a yet intenser hue.

From Norman-times 'tis said, maybe from Saxon,
This calm tree-circled lake secluded lay,
Pure as an infant's breast, its crystal mirror
Baring its inmost depths to gaze of day.

Some specks there are, some clay-flakes on its surface,
To open view revealed, like childish sin;
No roots have they, nor downward growth, to canker
The purity that dwells the Pool within.

Mystic the em'rald hue beneath the water,
Fairy the tint by which the scene is haunted;
Vainly I ask my senses if they wake,
Or is the clear and silent Pool enchanted?

The swallow flits two-bodied o'er the water,
Its four wings like a windmill's sails outspread;
Through the dark horsetails shoot the silver grayling,
To seize the May-fly skimming overhead.

Flying from lawless love—so runs the story—
A maiden plunged beneath this silent wave;
There, where a holly sits the bank so closely,
She sprang and sank—beyond all power to save.

Six hundred years and more since that dark legend,
 Legend that stained a king with lasting shame—
 And still the deep and silent Pool lies crystal,
 Crystal and clear as that poor maiden's fame.

Yet mystic is the hue beneath the water;
 Unreal the tint by which the scene is haunted;—
 Again I ask my senses if they wake,
 Or if the Silent Pool's indeed enchanted?

Macmillan's Magazine.

FORGOTTEN JOKES.

Good jokes, as a rule, confirm the truth of the Pythagorean philosophy: they never die, but they pass through a thousand different shapes. Some there are, however, of rare excellence, yet made of perishable materials, and doomed by their very appositeness to live only with the memory of the facts which gave them birth. To take an instance:—When the Prince of Orange came to England, at the time of the Revolution, five of the seven bishops who had been sent to the Tower declared in his favor, while two held obstinately aloof. This occasioned Dryden's admirable epigram, "that seven golden candlesticks had been sent to the Tower to be assayed, and five of them proved to be prince's metal." This is a good specimen of stereotyped wit; no second edition of it, with alterations, is possible. On the other hand, take a remark of Garrick's, which, under circumstances slightly similar, could evidently be utilised again. Mr. Twiss, we are told, a romancing traveller, was talking of a church he had seen in Spain a mile and a half long. "Bless me!" said Garrick; "how broad was it?" "About ten yards," said Twiss. "This is, you'll observe, gentlemen," said Garrick, to the company, "not a round lie, but differs from his other stories, which are generally as broad as they are long." Obviously such a joke, when found, is to be made a note of for discreet use on a future occasion. A dexterous person, desirous of being uncivil, might even lead up the conversation to it. Probably, too, it is much older than the age of Garrick, who, again, was a gentleman, and very unlikely to say anything so atrociously rude, though he is credited with having given Sterne a severe dressing. It is

painful to remember that the author of *Tristram Shandy* treated his wife very badly; notwithstanding which he was sufficiently ill advised to maunder one day, in the presence of Garrick, in praise of conjugal love and fidelity. "The husband," said Sterne, "who behaves unkindly to his wife, deserves to have his house burnt over his head." "If you think so," quietly remarked Garrick, "I hope your house is insured."

Indeed, though we frequently speak of our "rude" ancestors, we never, perhaps, understand how very rude they were till we look into an old jest-book. No wonder duels were once common; all the humanitarian sentiment in the world could not have put a stop to them, had not men also begun to rule their tongues. The point of a sarcasm can be felt in an uncultured as well as in a polished age; only in the one wit is answered with wit, while in the other the happiest retort is sometimes held to be a crack on the head. Henry I., King of England, being ridiculed in a clever lampoon, could think of no brighter rejoinder than to have the author's eyes put out. Macaulay's, if not every, school-boy can remember the line of Nævius on the Metelli, and the dull but extremely pertinent answer of that noble family, which was to cast him into prison. One should remember, to the credit of Queen Bess, that she could now and then brook a tart rejoinder. It is reported that she once saw in her garden a gentleman to whom she had held out hopes of advancement, which he discovered were slow of realisation. Looking out of the garden, her Majesty said to him, in Italian, "What does a man think of, Sir Edward, when he thinks of nothing?" The answer was, "He thinks, madam, of

a woman's promise." The Queen drew back her head, but was heard to say, "Well, Sir Edward, I must not argue with you; anger makes dull men witty, but it keeps them poor." A smarter retort than the English courtier's was that of Frederick the Great's coachman, when he had upset the carriage containing his master. Frederick began to swear like a trooper; but the coachman coolly asked, "And you, did you never lose a battle?" The king replied with a good-natured laugh; always, doubtless, the most agreeable of royal answers. Perhaps Lord Chesterfield met the impertinence of a servant as well as any other man. He was dining at an inn, where the plates and dishes were very dirty. Lord C., complaining, was coolly informed by the waiter, for his consolation, that "every one must eat a peck of dirt before he dies." "That may be true," said Chesterfield, "but no one is obliged to eat it all at a meal."

Perhaps one of the most cruel things ever said was contained in Foote's advice to the Duke of Norfolk of that day. On a masquerade night, his Grace consulted the famous actor as to what character he should appear in. "Don't go disguised," said Foote, "but assume a new character—go sober." It should be remembered, however, that to be drunk was hardly thought discreditable in the eighteenth century. Water-drinkers in that generation were designated, not teetotalers, but milksops—a word which still carries reproach with it; though, in truth, a man who should drink nothing but milk would be stronger, both in nerve and muscle, than a man who drank frequently of gunpowder tea—to leave whisky out of the question.

It was the successor of the Duke of Norfolk in question who consulted Abernethy for some ailment, and was asked whether he had ever tried the remedy of a clean shirt. Before his accession to the title, when he was called by courtesy Earl of Surrey, he was in the House of Commons on the Whig side. It was a question one day among the chiefs of the party as to who would be the proper person to move a certain amendment. Fox finally decided in the words, "Saddle *Black Surrey* for the field to-morrow." In contemporary caricatures, this nobleman's little peculiari-

ties are illustrated with unsavory minuteness of detail. Yet he was a good man, a sincere Liberal, and had the courage of his convictions. It was he who, under the Pittite reign of terror, proposed the toast of "The People, Our Sovereign," for which he was deprived of his colonelcy and his commission as lord lieutenant, while his name was publicly struck off the list of Privy Councillors by the King's own gracious hand. Fox's name was effaced at the same time, because he had been present at the banquet. Moreover, the great orator had very early begun to say things which sounded ill in the ears of Majesty. During the War of Independence, Lord North was once exulting over the Opposition on the publication of a *Gazette Extraordinary*, to the effect that New York had been taken. Fox answered, "It is a mistake, sir; New York is not conquered, only it is, like the Ministry, *abandoned*." His commentary on a passage in the Psalms consisted of a still neater pun. Some person had asked him what was the meaning of the verse, "He clothed himself with cursing, like as with a garment." "I think," said Fox, "it is clear enough; the man had a habit of swearing."

But the wit, *par excellence*, of the Whig party, it is needless to observe, was Sheridan, who has been called the English Hyperides, as Fox was unquestionably the English Demosthenes. Few, indeed, of his jokes are forgotten, and those that are deserve to be. For occasionally, if the truth must be told, Sheridan was merely snappish, and could find nothing better than an unworthy *tu quoque* with which to reply to a hostile criticism. When the *School for Scandal* was first acted, Mr. Cumberland was asked to give his opinion of it. "I am astonished," said he, "that the town can be so completely mistaken as to think there is either wit or humor in this comedy. I went to see it, and it made me as 'grave as a judge.'" Of course good-natured friends made haste to communicate with Sheridan, who merely said, "Mr. Cumberland is very ungrateful, for when I went to see his tragedy of the *Carmelite*, I did nothing but laugh from the beginning to the end." Perhaps this was irresistible, but it was poor enough—for Sheridan. It belongs essentially to the

order of commonplace jokes. So does a capital one of Dr. Garth's; for there are good plain jokes as there are good plain dishes, which can still be relished by *gourmets* who know the flavor of truffles. Garth was attending Marlborough, and had prescribed a very disagreeable potion, which the illustrious warrior strongly objected to take. Duchess Sarah, whose one merit was to love her husband, joined her entreaties to those of the doctor, exclaiming (with not unwonted vehemence), "I'll be hanged if it doesn't cure you." "There, my lord," quietly interposed Garth; "you had better swallow it. You will gain either way."

Numberless have been the jokes against physicians and the art of healing; one of the best, because unintentional, was made by a French lady, whom we may call Madame X., and who was in the habit of consulting her physician, Dr. Z., daily, between the hours of two and three. The doctor was a witty and charming man, and they talked of every subject under heaven. One day, however, the doctor came and was denied admittance. He thought there must be some mistake, and ordered the servant to announce him again. This time the lady sent down a very polite message, informing the doctor that "she was grieved beyond measure at being obliged to deny herself the pleasure of his company, *but she was very ill.*" Doctors themselves, however, have said the hardest things of their craft. Radcliffe used to threaten his brethren of the faculty "that he would leave the whole mystery of physic behind him, written on a half-sheet of paper." The medical men of the day revenged themselves for his contempt by denying him any knowledge of physic. In the same way, Nelson was said by the one or two enemies he had made, or rather who had made themselves, to possess no knowledge of navigation.

Dr. Radcliffe, by the way, had an extremely objectionable habit; namely, that of leaving his bills unsettled. In his days, each Londoner had to pave the street in front of his own door—at all events, the parish would not pave it for him. A certain pavior, who had been employed by the doctor, after long and fruitless attempts to get paid, caught

him just getting out of his carriage at his own door in Bloomsbury Square, and set upon him. "Why, you rascal," said Radcliffe, "do you pretend to be paid for such a piece of work? Why, you have spoiled my pavement, and then covered it over with earth to hide your bad work." "Doctor," quoth the pavior, "mine is not the only bad work that the earth hides." "You dog, you," said the doctor; "are you a wit? You must then be poor, so come in;" and he paid him. Talleyrand, less good-natured, jested with his creditors, and did not pay them.

Avarice and a want of punctuality in paying bills are not often combined, your miser being in mortal dread of writs of law-courts; but Radcliffe is reported to have been close-fisted as well as inexact in his accounts. Probably both the one tendency and the other have been exaggerated by his detractors; but there is a whimsical anecdote in reference to one of the doctor's supposed failings, which will bear repetition. Attending an intimate friend during a dangerous illness, he declared, in an unusual strain of generosity, that he would receive no fee. At last, when the cure was complete, and the physician was taking his leave, "I have put every day's fee," said the patient, "in this purse, my dear doctor; nor must your goodness get the better of my gratitude." The doctor eyed the purse, counted the days of his attendance in a moment, and then, extending his hand by a kind of professional mechanical motion, replied, "Well, I can hold out no longer; single I could have refused the guineas, but all together they are irresistible."

That was not a bad joke on the medical profession which was made by a clergyman in the time of Cromwell, who was deprived of his living for nonconformity. This parson, a harmless man enough, went about saying to his friends, "That if he were deprived, it should cost a hundred men their lives." Summoned before a magistrate, he thus interpreted his words: "Should I lose my benefice, I am resolved to practise physic, and then I may, if I get patients, kill a hundred men."

Priests, indeed, were witty long before laymen, and they have at all times contributed their fair share to the world's

stock of good sayings. Among the less known is the happy answer of a bishop to a clergyman of less than moderate abilities, who demanded a license to preach. "I grant you permission," replied his lordship, "but nature refuses it." *Contrà*, it was a fine compliment that Louis XIV. paid to Massillon. "My father," he said, "I have heard several great orators, and been pleased at their discourses; whenever I hear you, I am very ill-pleased with myself."

The Abbé Boileau, brother of the poet, has left on record a fine specimen of the courtly compliment. The great Condé, on entering the city of Sens, was formally harangued, according to the custom of the times, by the Dean, in the name of the Cathedral Chapter. The Prince leant forward, as if to hear the orator more distinctly, but in fact it was his intention to put him out of countenance. The Dean (Boileau) saw the move, and turned it to his own advantage. He pretended to be much agitated, and began his speech as though laboring under great agitation. "Your highness," he said, "must not be surprised to see me so nervous and so much agitated on appearing before you at the head of these inoffensive ecclesiastics, for if I were now facing you at the head of a large army I should tremble much more than I do." Condé rewarded the Dean with an invitation to dinner.

Perhaps those deserve most credit who have remembered to be witty under difficulties. Bassompierre, Marshal of France, was confined for twelve years in the Bastille, during which time, his diet being not illiberal and his facilities for exercise small, he grew extremely fat. On his release the old soldier presented himself at court, when the Queen thought it a good joke to ask him how soon he meant to lie in. To which the Marshal replied, "May it please your Majesty, I am only waiting for a wise woman" (*sage femme*). Anne of Austria had at least the good sense to put up with the retort. The King, Louis XIII., asked him his age; the Marshal replied that he was fifty. The King expressed some surprise at the answer, for Bassompierre looked quite sixty. The latter continued, "Sire, I deduct twelve years passed in the Bastille, because I did not employ

them in your service." Before his imprisonment, Bassompierre had not always been too careful of his language in addressing Louis himself. He was one day describing his embassy to Spain and related how he made his solemn entry into Madrid, seated on a mule. "What a joke," exclaimed his Majesty—"an ass seated on a mule!" "Yes, Sire," assented the other, "and what made the joke better was that I represented you." The Kings of France at this epoch must have been powerful indeed, and the distance between them and the most powerful of their subjects must have been well defined, when one of them could forgive such a liberty.

The finest specimens of wit are not always the most appreciated; while there is a rough, not to say brutal, style of joking which has often been found effective. A French general once levied a contribution on a German religious house. The monks pretended they could not understand the French in which the order was couched, whereupon the general said he would put his request into Latin. It ran thus: "*Si non payatis, brulabo abbatiam vestram.*" 'Twas a sorry joke, but had wonderful success, for the money was paid within an hour. It is so easy for a general at the head of a victorious army to break a jest which shall be applauded, or, at all events, one of which the merits shall be seriously taken to heart.

As for Kings, Scott truly observes that they can always, if not the most dull-witted of men, obtain conversational triumphs, seeing that they are at liberty to introduce any subject they please, continue the discussion as long as it suits them, and close it at their good pleasure. They can, moreover, generally say as many ill-natured things as they please, without fear lest their victim should have the courage of a Bassompierre. Of really witty kings there have probably been but few. Napoleon and Louis XIV. made fine speeches on occasion, but they cannot be credited with any genuine specimens of impromptu eloquence. Perhaps the wittiest—certainly one of the wittiest—of princes, was Charles II. of England. The best of his sayings are too well known to need repetition, but here is one that has escaped a good many collections of ana. It is

given in an amusing little work, entitled *Flowers of Wit*, by the Rev Henry Kett (London, 1814). "This facetious monarch," writes the compiler, "asked Dr. Stillingfleet how it happened that he always read his sermons before him, when he was informed that he always preached without book elsewhere. The doctor told the King that the air of so noble an audience, and particularly the royal presence, made him afraid to trust himself. 'But, in return, will your Majesty give me leave to ask you a question too? Why do you read your speeches, when you can have none of the same reasons?' 'Why truly, doctor,' replied the King, 'your question is a very plain one, and so will be my answer. I have asked my subjects so often, and for so much money, that I am ashamed to look them in the face.'"

Several more of the anecdotes given above are due to the industry of Mr. Kett, who avows in his preface that he loved a joke, but apparently entertained some scruples as to whether it were indeed lawful for a pastor to occupy his time in so frivolous a pursuit as the compilation of a jest-book. He comforted himself, however, with the examples of Erasmus, of Camden, and of Bacon. The last is said to have been an extraordinary instance of precocious wit. Queen Elizabeth asked him, when he was quite a child, how old he was. "Madam," gravely answered the little creature, "I was two years old when you began your happy reign." Unfortunately it is impossible to forget that Elizabeth succeeded her sister on November 17, 1558, and that Bacon was born on January 22, 1561. A more authentic sentence of Bacon's belongs to the period of his old age and disgrace. Gondomar, the Spanish ambassador, called upon him after his condemnation by the House of Peers, and intending to taunt him in his misfortunes, said, "My lord, I wish you a merry Easter." "And to you, señor," replied the ex-Chancellor, "I wish a merry Passover;" thus reminding the ambassador of his Jewish descent, which was the most cutting retort that could be made to a Spaniard.

It was truly said by Arthur Lord Capel that "sharp and bitter jests are blunted more by neglecting than by responding, except they be suddenly and wittily

retorted; but it is no imputation to a man's wisdom to use a silent scorn." It was of this model Christian gentleman that Lord Clarendon wrote: "He was a man that whoever shall after him deserve best of the English nation, he can never think himself undervalued, when he shall hear that his courage, virtue, and fidelity are laid in the balance with, and compared to, that of the Lord Capel." Lord Capel's saying may be termed a familiar scriptural maxim inculcated from the world's point of view. So Thackeray, in a similar, but more genial, mood, reminded his hearers that "if fun was good, truth was still better, and love best of all."

Wit without malice is like the wine of Paradise which exhilarates, so Moslem doctors aver, without the fear of reaction. For he who has spoken an uncharitable word, how wittily soever, will surely regret it when the occasion is past. If he never has cause to repent of it, then he is still more unhappy, for he must need a long discipline of sorrow, which will not probably be accomplished in this world. And yet a snub does at times require to be administered for the benefit of society, and some persons must be summarily suppressed that others may breathe in peace. A good specimen of the proper method of rebuking impertinence was furnished by the Rev. John Carter, incumbent of Bramford, in Suffolk, a man at once learned and modest. He was dining at the house of a worthy alderman of Ipswich, when one of the company boasted of his own acquirements, and, growing bold with impunity, proceeded to such lengths that he defied any one present to start a question in theology or philosophy to which he could not give a ready and a satisfactory answer. An awful silence fell on the guests at this proposal, and for a few seconds no sound was heard but the clatter of knives and forks; when Mr. Carter looked up, and said, "My plate furnishes me with a question to pose you. Here is a fish that has always lived in salt water; pray tell me why he should come out a fresh fish, and not a salt one?" This simple query utterly discomfited the bully of conversation, who for the remainder of the feast ate much, and spoke little.

To define wit is probably impossible.

The name the French give it—*esprit*—of itself marks an essence which can be described by no material lines. It seems to consist of humorous, picturesque, or poetic analogies, but humor and poetry are themselves hard to define. Dryden has said—

A thousand different shapes wit wears
Comely in thousand shapes appears:
'Tis not a tale, 'tis not a jest,
Admir'd with laughter at a feast;
Nor florid talk which can this title gain,—
The proofs of wit for ever must remain.

Which lines convince one that "glorious John" preferred beating about the bush to venturing on a clear definition. Alphonse Karr says that "Wit is Reason armed." *Naïveté*, a word which we have been forced to borrow from the French, though we can assuredly appreciate it full as well as the Gallic race, would seem to be unconscious humor. Of all kinds of wit, none has so delicious a flavor as *naïveté* which indeed is Nature's own, and therefore necessarily superior to the artificial productions of man. The famous offer of a Napoleon—sometimes attributed to the late Alexander Dumas—to contribute enough money to bury twenty lawyers, may be traced to the *naïve* utterance of a French provincial magnate, as recorded by Talemant des Réaux. An "intendant" of Languedoc, whose wife had died at Béziers, desired that the province should pay the expense of her funeral. The good folk of Languedoc, however, ob-

jected that, if they were to agree, a precedent of a doubtful kind would thereby be created, not (they carefully instructed their deputies to remark) that they would refuse to bury M. l'Intendant; no, that they would do with pleasure; but, &c. The Irish bull may be considered as the Hibernian form of *naïveté* and a charming form it often assumes. When Ireland had her own Parliament, it was not always Curran, or Grattan, or Hamilton who must have furnished the greatest delight to the House, but such gentlemen as Boyle Roche, who once exclaimed, "Mr. Speaker, I would give the half of the constitution—nay, the whole of it—to preserve the remainder." This same child of Erin wrote from a country-seat where he was staying, to a friend in Dublin: "At this very moment, my dear —, I am writing with a sword in one hand and a pistol in the other." He was also heard to speak in the severest terms of "a certain anonymous writer named Junius." Denouncing his opponents in Parliament, he thus apostrophised them: "You are trying to raise a tempest, but I will nip it in the bud;" which reminds one of the English judge, 'Prisoner at the bar, God gave you health and strength; instead of which you go about stealing cows.' In truth, neither *naïveté*, nor wit, nor humor are the exclusive possessions of any one nationality; rather do they display touches of human feeling "which make the whole world kin."—*Cornhill Magazine*.

GEORGE SAND AND GEORGE ELIOT.

COMPARISONS are odious only when they are made with the invidious purpose of giving a higher or a lower degree to talents equal in their supremacy. Where no such design is entertained, there can be no harm in setting the genius of the greatest Frenchwoman who has expressed herself in fiction against that of the greatest Englishwoman of this generation. The points of likeness and of difference in the powers of George Sand and of George Eliot are many, and full of suggestions about the nature and limits of their art. At the least, the attempt to compare the two novelists must bring back to mind many

hours of pleasant study, and many old acquaintances who abide within the boundaries of romance. It is well, perhaps, to begin with marking the natural and necessary differences which separate two spirits that have many points of contact. In the first place, there is the difference of race and of national manners. George Sand wrote much which no one can even imagine an Englishwoman to have written; and, if it is a good thing for a novelist to be quite unfettered in choice of subject, she certainly possessed that advantage. No Englishwoman could have published *Lucrezia Floriani*, or *Daniella*, just as no

Englishwoman could so far have shaken off the reticence of our race as to have produced *Lélia*. Thus the difference of moral standard in France and England tempted, and almost compelled, Mme. Sand into efforts of "romanticism," into the search for what she calls *bizarries*, which did not really lie in the direct path of the development of her genius. She herself has confessed that it was more fashion than curiosity, powerful as curiosity was with her, that led her into dark paths and places of human nature, better left unexplored. After all, she gained little from this wider range, except the occasional indulgence towards moral aberration which is the least pleasant trait of her genius. The sudden strokes of novelty, the weird effects, that Victor Hugo finds in places seldom visited by the sun, are very rare in her work.

Another point of difference between George Sand and George Eliot was perhaps a drawback to the powers of the author of *Consuelo*. From the moment when she began to write, comparatively early in life, she was chained to the desk. She brought out on an average two novels a year, and no reading and no experience could supply material for such incessant industry. Crop after crop had to be raised off a soil which was never exhausted indeed, but which was cultivated in a very perfunctory way. Mme. Sand's longing for time and leisure to pursue the studies that attracted her in history and science recurs again and again in her Memoirs. But she was obliged actually to "cram" for her historical novels, and *Consuelo* was written from hand to mouth by the author, who was employed in getting up the chronicles of the eighteenth century on one day, and in composing the adventures of her heroine on the next. This rapid manufacture is in strong contrast to the comparatively slow production and elaboration of *Romola* and of *Daniel Deronda* out of rich stores of knowledge. Yet perhaps neither *Consuelo* nor *Romola* strikes the reader as being the natural and almost irrepressible outflow of a mind long acquainted with the distant age and vanished manners of Venice or of Florence. Both lack the spontaneity of *Esmond* and of *Old Mortality*, both are empty of the life

which is imparted by a genius that has lived with the men of old times as with familiar friends.

When once the differences of race, of national manners, and of accident are set aside, the resemblances between George Sand and George Eliot come more clearly into view. Both of them "drive at practice," and insist on edifying, so strenuously, that both have been accused of being prosy and didactic. This love of preaching is the result, in George Sand, of an assured and definite doctrine. She maintains, in almost every one of her novels, that half the unhappiness in the world, and most of the mischief, is the result of egotism, of what she calls *personnalité*. It is unnecessary to remark what stress George Eliot lays on the same theme. That the world was not made for Hetty, or for Rosamond, or for Gwendolen, is the constant burden of her sermons. But she expounds her secret, a very open secret, by a method which is not that of Mme. Sand. That lady's exemplary people, as, for instance, Edmée in *Mauprat*, the heroine of *Malgré tout*, the priggish hero of *La Filleule*, and a dozen other devoted and unselfish men, and more devoted and unselfish women, seem all to have been born good. They have a native horror of selfishness, and an instinctive fury of self-sacrifice. The motive for the self-sacrifice may be slight, or even ridiculous. Thus Sarah in *Malgré tout* actually impairs her fortune to satisfy the extravagant profligacy of her selfish sister's abandoned husband. All these persons of impossible and perhaps undesirable virtue seem to be good by what Aristotle would call *eúphra*, the best and noblest gift that a man can possess. They are examples, burning and shining lights, to the little world around them, and to the reader. Occasionally their influence and their love do work a change in the characters which meet them, and another soul is reclaimed from *personnalité*. All this is very different from the manner of George Eliot, who prefers to follow her characters through the hard and even cruel processes by which circumstances impress them with their own unimportance, knock the selfishness out of them, or punish them for retaining it. It is only here and there, in such a character as Dinah, that she

presents us with a pure soul after the type of Mme. Sand's women. Or perhaps even Dinah owes too much to religious enthusiasm, too little to nature, and Romola comes nearest to the heroines beloved by Mme. Sand.

Consuelo, Edmée, and many others, then, are pure from the beginning, and do not need to seek after any master in conduct, or to grope after any doctrine. On the other hand, it is a remarkable feature about George Eliot's good women that they are always more or less in search of a master and a rule of life. Dorothea, whose innate gifts of sweetness and charity are equal to those of Consuelo, blunders along under the guidance of Casaubon or of Ladislaw. Romola needs Savonarola. Gwendolen cannot get on without a daily sermon from Deronda. Janet's repentance comes after some seeking for spiritual light. Maggy Tulliver is always wandering afield after novelty and satisfaction, and running away, as in her childhood, with this or that tribe of moral and intellectual gipsies. Now Mme. Sand's heroines, after Mme. Sand began to write improving novels, have generally a strong tower of faith in Mme. Sand's own theory of life and of the universe. What searching for truth had to be done she did once for all, and almost in proper person, in *Lélia* and *Spiridion*. Surely no one ever sought the lost piece of silver with so many brilliant torches, or went after the lost sheep with such parade and flourishes of trumpets. But when once the marvellous manuscript of *Spiridion* was unearthed from the sepulchre, George Sand was at ease. If she had not found moral and religious truth, she was perfectly satisfied that she had found it. Her exemplary characters, for the future, lived undisturbed in the light of her own opinions.

Because George Eliot has not succeeded in settling things quite so early, and so easily, her novels are more full of struggle and of melancholy. The ends of her stories do not often leave people in that happy fairyland whither Mme. Sand conducts them, to live and love and do good, by the streams of the Vallée Noire. But though her characters are more oppressed in the long run by the austere melancholy produced by the spectacle of life than are those of George

Sand, they suffer much less from the domestic tortures which the Frenchwoman described with such refinement. The retrospective jealousy that poisons the happiness of Jacques, the wild, theatrical passions of Horace, of Abel, of Laurence, are almost unknown in the novels of George Eliot. People do not refine so much on love, nor quarrel so much with the form of it entertained by their wives or lovers. There is far less analysis of the meaner sickness of the soul, and of the hypochondria, so to speak, of the heart. The artistic nature is not allowed to hurry its victims into the excesses of George Sand's people; and though George Eliot can tolerate Will Ladislaw, it is probable that she would despise Abel, the erratic musician of *Malgré tout*. Perhaps George Eliot comes nearest to George Sand in her portraits of the weak and dishonest men who succeed in making themselves acceptable to women. We may see a likeness between the Raymond of *Indiana* and Arthur Donnithorne, between Tomaseo and Tito Melema. But George Sand is more tolerant in the midst of her contempt than George Eliot, and more disposed to give her weak, sleek young men the character of gentlemen. She could not have borne to admit that Lydgate was "spotted with commonness," and would probably have brought him in triumph out of his difficulties, and married him to Dorothea.

Another matter which the two novelists have in common is love of nature, and power of describing it with complete success. It is probably almost an accident that in George Sand this characteristic is more marked, that she found opportunity to write prose Georgics about the rural life which her contemporary knows almost as well as herself. But in connexion with this rustic life, George Sand's fatal defect shows itself most clearly. She has scarcely any humor of the sort that moves laughter; her clowns are too grave, too good, or too greedy to be witty. Mrs. Poyser is as much out of her sphere as Joseph Andrews; she would have had no patience with Aunt Pullet and Aunt Glegg, and probably, among all the characters of her countryside at Nohant, knew no one at all like Bob Jakin. To be sure, she introduces in *Mauprat* a person whom Mr. Jakin would have called "the biggest rat-

catcher anywhere." But he kills rats with a sword, and is more like Don Quixote than a rat-catcher should be. It may be urged that George Sand's clowns are grave for the same reason as Millet's peasants, because their race, their history, and the character of their scenery and of their toil, depress them. But the defect more probably lies in her own want of humor and in her restless, devouring earnestness. Her rustics dance, and sing indeed, and make love; but they rarely say a good or memorable thing.

It would be easy to pursue the parallel between the two minds much further—to compare, for example, the social views of the creator of Pierre in *Le Compagnon du Tour de France* with the not very dissimilar ones of the creator of Adam Bede. The French and the English carpenters are good types of their class at its best—the one with his exclu-

sive devotion to "the idea," and his improbable refinement, a conqueror of ladies; the other with his gravity and stoic content with "his place" and his work. We might contrast, too, the style of the moralizings of the writers—the English novelist being rather inclined to work a thought too hard, and to run to scientific analogies that do not always yield much light; the Frenchwoman "leaving you with plenty of matter for thought at the end of one of her brief, rich, melancholy sentences." But it is more pleasant to part from them on a ground that they have in common—namely, the tender recollections of childhood, the love of the homely landscape familiar from early years, "the sky with its fitful brightness, the furrowed and grassy fields, the well-remembered bird-notes" of Loamshire or of Berry.—*Saturday Review*.

PARROTS.

THERE is no tribe of birds more interesting than that of parrots. The beauty, and often the splendor, of their plumage commands admiration; and they have still stronger claims to our regard in their intelligence, the readiness with which they are tamed, their affectionate yet strangely capricious dispositions, their display of passions resembling those of human beings, their monkey-like trickiness and mischievousness, their power of imitating the most various noises, and especially the power which some of them possess of learning to articulate words, to utter sentences, and even to repeat compositions of some length and to sing songs. Nor can any one fail to be amused with the eagerness they manifest to shew off their acquirements, their loquacity, and the opportune or inopportune appropriateness with which their speeches are sometimes delivered.

In the parrots, the foot is so admirably adapted for grasping, that it is freely used as a hand for a variety of purposes, and especially for taking hold of food and bringing it up to the mouth. The number of different species of this family is very great, and they are natives of almost all tropical and subtropical

regions. In the Old World no species is found so far north as Europe; but in America there is one of which the geographical range extends even to the neighborhood of the great lakes; and in the Southern Temperate Zone members of the parrot family occur in Tasmania and Tierra del Fuego. The species differ much in size; the Great Macaw of America being more than three feet long, tail included, and the Love-birds of Australia about the size of sparrows. Most of them dwell in forests, but a few are inhabitants of grassy plains. With a few exceptions they are gregarious, and are often seen in large flocks, which make a prodigious screaming. They often commit great ravages in fields and gardens. The British farmer, who complains of the damage done by rooks or pigeons has no experience of winged plunderers at all to be compared with that of one whose fields of ripening grain are exposed to the visitations of flocks of many hundreds of parrakeets or cockatoos. It is not to be wondered, therefore, that settlers in countries where birds of this tribe abound, wage incessant war against them; and thus the Carolina parrakeet has in a great measure disappeared from parts of North

America where it was once plentiful, and the spectacle is no longer common of a stack on which a flock of these birds has alighted seeming, as Audubon says, as if a brilliantly colored carpet had been spread over it.

Of the multitudes in which birds of the parrot tribe sometimes congregate, some idea may be formed from the following animated description of an Eastern scene by Mr. Layard: 'I have seen at Chilán such vast flights of parakeets coming to roost in the cocoa-nut trees which overhang the bazaar, that their noise drowned the babel of tongues bargaining for the evening provisions. Hearing of the swarms which resorted to this spot, I posted myself on a bridge some half-mile distant, and attempted to count the flocks which came from a single direction to the eastward. About four o'clock in the afternoon, straggling parties began to wend towards home, and in the course of half an hour the current fairly set in. But I soon found that I had no longer distinct flocks to count; it became one living screaming stream. Some flew high in the air till right above their homes, and dived abruptly downward with many evolutions till on a level with the trees; others kept along the ground and dashed close by my face with the rapidity of thought, their brilliant plumage shining with an exquisite lustre in the sun-light. I waited on the spot till the evening closed, when I could hear, though no longer distinguish the birds fighting for their perches; and on firing a shot they rose with a noise like "the rushing of a mighty wind," but soon settled again, and such a din commenced as I shall never forget; the shrill screams of the birds, the fluttering of their innumerable wings, and the rustling of the leaves of the palm-trees, were almost deafening, and I was glad at last to escape to the Government Rest House.'

The species of the parrot family are easily recognised as belonging to it; but the characters which distinguish one group of them from another are not always so clear and decided. There are groups, however, which are sufficiently well marked to have received distinct popular names. There is one group which may be regarded as that of the true parrots, for to them the name Par-

rot is more strictly appropriated; whilst others are known as Parrakeets or Parroquets, Cockatoos, Macaws, Lories, and Love-birds. Of the true parrots, one of the best known species is the Gray Parrot, a native of Africa, which is very often brought to this country, and is excelled by none of the parrot kind in powers of imitation and speech, docility, affectionateness, and mischievousness. It is about the size of a small pigeon, of an ash-gray color, with a short crimson tail. It has been known to attain the age of nearly a hundred years. Some of the parakeets are nearly equal in size to the gray parrot, but most of them are smaller. They generally have long tails. The Alexandrine Parrakeet, or Ring Parrakeet, which is green, with a red collar, was the first of the parrot tribe known to the Greeks and Romans, and was much prized by them. It possesses in a high degree the same qualities for which the gray parrot is esteemed. It is said to have been first brought from India by some of the members of Alexander's expedition. Cockatoos are notable for the large size of the head and the great height of the bill. Some of them are very docile and tractable, but they do not often learn to speak many words. They are all natives of Asia and the Indian Archipelago. Some of them are among the largest of the parrot tribe. Macaws are also generally large and their plumage is splendid; they have long pointed wings and a very long tail. They are natives of tropical America. They do not readily learn to speak more than a few words. Lories and love-birds, which are mostly natives of Australia and the Eastern Archipelago, are valued chiefly for their beauty, liveliness, and gentleness.

The resemblance between parrots and monkeys in their dispositions and habits is very strong. Like monkeys, parrots display a remarkable degree of intelligence; and like that of monkeys, it is often devoted to the accomplishment of the tricks in which they delight. The brain in parrots is larger and more perfect than in any other kind of birds. Exaggerated ideas of the intelligence of parrots have, however, been entertained by some, who, misled by the amusing appositeness with which they often utter the sentences they have learned to speak,

have too hastily concluded that they fully understand the meaning of what they say. The parrot, an account of which appeared in the *Journal* of October 31, 1874, was the best speaker we ever heard. But no well-authenticated instance is on record of one having ever shewn a capacity for rationally sustained conversation. There is indeed a well-known and often repeated story of a parrot in Brazil which excited much speculation two hundred years ago, and which Locke thought worthy of a place in the midst of a grave philosophical discussion in his *Essay on the Human Understanding*, which has been regarded as indicating something of this kind; but it is not more wonderful than many other trustworthy anecdotes of parrots, which may easily be explained by supposing these birds to possess—as they certainly do possess, in common with many other animals—memory and association of ideas, so that words addressed to them and the tone in which these words are spoken recall the acquired sentence that seems their appropriate reply; or the utterance of an acquired sentence is suggested by the presence of some person, or by some circumstance that occurs. Locke quotes the story from Sir William Temple's *Memoirs of what passed in Christendom from 1672 to 1679*. Sir William Temple says: 'I had a mind to know from Prince Maurice's own mouth the account of a common but much credited story that I had heard so often from many others of an old parrot he had in Brazil, during his government there, that spoke and asked and answered questions like a reasonable creature; so that those of his train there generally concluded it to be witchery or possession.' He accordingly asked Prince Maurice about the matter, who told him that having heard of the parrot he sent for it; and that when it was brought into the room where he was, with a great many Dutchmen about him, it presently exclaimed: 'What a company of white men are here!' They asked what it thought that man was, pointing to the Prince. The parrot answered: 'Some general or other.' When they brought it close to him, he asked it: 'Whence come you?' It answered: 'From Marinnan.' The Prince then said: 'To whom do you belong?' The

parrot replied: 'To a Portuguese.' The Prince asked: 'What do you do there?' The parrot said: 'I look after the chickens.' The Prince laughed, and said: 'You look after the chickens?' The parrot replied: 'Yes; and I know well enough how to do it;' and began to cluck like a hen calling chickens. This parrot appears only to have been a well-trained bird, accustomed to say certain things, and ready to say them, but them only, on occasions such as arose from the presence of the Prince and his attendants and the questions addressed to it.

How far parrots are from being capable of acquiring the use of language, or anything more than the mere power of articulating words, clearly appears from the unquestionable fact that they never originate a sentence for themselves, but utter only sentences or broken sentences, which they have heard and acquired. They do, however, seem sometimes to use these sentences with a view to some purpose, as to call for some person whose company they desire, to ask for food, and the like; but this gives proof of no greater intelligence than a dog exhibits in obeying the commands of his master, or in petitioning after his own fashion for one thing or other, as all dogs do. Indeed, we may fairly suppose that if dogs possessed the same power of articulation as parrots, they would use it even to better purpose.

This paper may be appropriately concluded with a few anecdotes of parrots, some old and some new, illustrative of what has been said concerning them. The powers of memory which parrots possess are strikingly exemplified in one of the oldest stories of this kind on record, of a parrot at Rome about the end of the fifteenth century which could recite accurately the whole of the Apostles' Creed, and which was purchased by a cardinal for the enormous price of fifteen hundred golden crowns.

The death of a parrot was thus announced in the *General Evening Post* for the 9th of October 1802: 'A few days ago died in Half-moon Street, Piccadilly, the celebrated parrot of Colonel O'Kelly. This singular bird sang a number of songs in perfect time and tune. She could express her wants articulately, and give her orders in a man-

ner nearly approaching to rationality. Her age was not known; it was, however, more than thirty years, for previously to that period, Colonel O'Kelly bought her at Bristol for a hundred guineas. The colonel was repeatedly offered five hundred guineas a year for the bird by persons who wished to make a public exhibition of her; but this, out of tenderness for his favorite, he constantly refused. 'This parrot, we are told, 'beat time with all the appearance of science; and so accurate was its judgment, that if by chance it mistook a note, it would revert to the bar where the mistake was made, correct itself, and still beating regular time, go through the whole with wonderful exactness.'

In Willughby's translation of *Clusius his Discourse and Account of Parrots* we read as follows: 'The noble Philip Marnixius of St. Aldegonde had a parrot whom I have oft heard laugh like a man, when he was by the bystanders bidden so to do in the French tongue, in these words: "*Riez, perroquet, riez*" [Laugh, parrot, laugh]; yea, which was more wonderful, it would presently add in the French tongue, as if it had been endued with reason, but doubtless so taught: "*O le grand sot qui me fait rire!*" [O what a fool to make me laugh!], and was wont to repeat these words twice or thrice.' This has sometimes been adduced as a proof of the great intelligence of parrots. It is evidently, however, rather an illustration of memory and association of ideas, which, along with other things, will be found illustrated also in the following account communicated to us of a parrot in London.

A blue macaw in Brook's menagerie imitated to perfection the snarling, barking, and howling of dogs, and the cackling and crowing of fowls, and would also astonish the visitors by its readiness in mimicking any peculiar voice in the company. Dr. Thornton bought the bird for fifteen guineas; but it moped, sickened, and seemed to have lost all imitative power till it was released from captivity and allowed the range of the house. Then it speedily recovered health and regained the beauty of its plumage, made itself perfectly at home, became very loquacious, and played many amusing tricks. Its sense of smelling was very acute, and it was

generally the first to announce that dinner was ready. Its mode of shewing gratitude or satisfaction was by half expanding its wings with a gentle tremulous flutter of the feathers, and uttering a low and not displeasing note. If food was proffered which its instinct or caprice rejected, it would take it with its foot and throw it down with an exclamation which sounded like '*There!*' Food that was to its liking was carefully examined, tasted, and then conveyed to the bird's own tin dish, in which it was packed close by pressure with the bill. If any of the children fell or was hurt, Poll was the first to give the alarm, and did not cease clamoring till the cause was attended to. Dr. Thornton's son taught this parrot to descend from its perch at word of command and to stand upon his finger; then, on another order, it turned back downward, and hung on the finger by one foot, retaining its hold although swung about ever so violently. Like many other parrots and cockatoos, it was evidently vain and very susceptible of flattery; and was generally prompt in complying, if asked, to extend its wings and shew their beauty. It would walk on the ground backward, if ordered to do so, walking in this direction with the utmost ease. It was extremely fond of music; and with movements of the feet along the perch, danced to all lively tunes, its wings also moving, and its head moving backward and forward in correct time. By a peculiar working of the serratures or *file* which all parrots have in the upper mandible, against the lower, it diligently strove to imitate the noise made by a scissors-grinder who weekly visited the street; but finding that this alone did not quite serve the purpose, it had recourse to the expedient of striking its claws against its tin-covered perch, and accurately observing the time of the turning of the wheel, effected so exact an imitation once or twice a day, that the neighbors said *the man* had become a perpetual nuisance.

From the same source with the foregoing we derive the following account of another parrot. A lady had a gray parrot of four years old, that learned new words and sentences every day, and made surprisingly correct application of them. Enjoying perfect freedom, he would sometimes indulge in the expen-

sive luxury of mischief, upon which his mistress would scold him, when he would indignantly reply: 'Not a naughty Poll,' 'Not a bold bad bird;' and reiterate, with stamping of his right foot and an up-and-down movement of his body: 'I am not—I am not!' When she praised him, he would tell her that she was a darling and that he loved her. He was very jealous of attentions paid to children, and when he saw them caressed would cry: 'Go away, bold girl!' or 'Go away, bold boy!' using the terms girl and boy with accurate discrimination. He remembered every name that he heard, and applied it correctly to the person. Once seeing a visitor without a dog he was accustomed to have with him, he called the dog by name and whistled for him, although neither the gentleman nor his dog had been at the house for some months. He would mimic a visitor's taking off coat or shawl, as if trying to divest himself of his wings,

and no one laughed more heartily at his performances than he did himself. He would play with the cats till tired of them, and then whistle for the dogs to chase them away. He was often allowed to be out of doors, and the crows would fly away in alarm from a tree when he got upon it, he calling *Good mornings* after them with great apparent delight.

'Let me catch you doing that again!' called out a parrot to some boys who given a run-away ring to the door-bell of a house at Acton. One of the boys seeing no one but the bird in the cage, and struck with a feeling of awe, called next day and apologised to the owner of the house. As he was quitting the hall, Poll exclaimed: 'O then, you won't do that again.'

Want of space compels us to refrain from adding to the number of these anecdotes; but interesting anecdotes of parrots might easily be multiplied so as to fill a volume.—*Chambers' Journal*.

A RIVER SONG.

SOFT arms about my throat,
Soft cheek against my hair,—
Lazily slides our boat,
Drifting we know not where:
Lazily, lazily drifting down
By empty field and silent town.

The shadowed wheat anear
Drowsily murmureth;
Deep in the hills we hear
The south wind's failing breath
Lazily drifting down the stream,
From light to shade—from day to dream.

Blackwood's Magazine.

EX-PRESIDENT WOOLSEY, OF YALE COLLEGE.

BY THE EDITOR.

MANY years ago, a portrait of Dr. Woolsey appeared in the *ECLECTIC*, in conjunction with those of two other contemporary professors in Yale College; but the wide fame to which he has since attained, and the great progress which he has made in the respect and affection of his countrymen, will probably render a new, later, and much more carefully executed portrait acceptable to

our readers. Moreover, our list of Americans eminent for their services in the cause of education would be inexcusably defective if it failed to include the name of President Woolsey.

THEODORE DWIGHT WOOLSEY was born in the city of New York, on the 31st of October, 1801. He was graduated at Yale College in 1820, studied theology at Princeton between 1821 and 1823,



Engraved for the Editors by J. J. Cade from a Photo by Phelps.

THEODORE WOOLSEY, L.L.D.
(EX-PRESIDENT OF YALE COLLEGE.)

and from 1823 to 1825 was tutor in Yale College. In the last named year he was licensed to preach. In 1827, he went to Europe, for the purpose of prosecuting his studies, spending his time mostly in Germany, and giving his attention chiefly to Greek; and shortly after his return to the United States in 1830 he was appointed Professor of Greek in Yale College. Fifteen years later, in 1846, he was chosen President of that institution, and in addition to the duties of that office, took upon himself the instruction of the students in history and political science. At the time of his inauguration, he was also ordained a minister of the Congregational Church. He received the degree of LL.D. from Wesleyan University in 1845, and of D.D. from Harvard College in 1847.

As an author, Dr. Woolsey is very favorably known by five excellent manuals (each containing the Greek text with his own English notes), of which there have been many editions prepared for the use of colleges in the United States, viz.: "The Alcestis of Euripides" (1833, revised in 1837 and 1841); "The Antigone

of Sophocles" (1835, revised in 1840 and 1851); "The Electra of Sophocles" (1837, revised in 1841 and 1852); "The Prometheus of Æschylus" (1837, revised in 1841 and 1849); and "The Gorgias of Plato" (1842, 2d edition in 1848). In 1860 he published an "Introduction to the Study of International Law," which at once took a high position, and is acknowledged to be the best popular treatise on the subject. A second revised edition of this work appeared in 1864. Besides his more extended works, Dr. Woolsey has also printed occasional sermons and addresses, and has been a frequent contributor to the quarterly periodicals, especially to the "New Englander." A series of articles written for this latter review was published in 1869 under the title of "Essays on Divorce and Divorce Legislation, with Special Reference to the United States," and attracted wide attention.

In 1871 he resigned his position as President of Yale College, and has since lived a retired life; but is still regarded as a publicist of weight and authority on all questions of international law.

LITERARY NOTICES.

RELIGION AND THE STATE; OR, THE BIBLE AND THE PUBLIC SCHOOLS. By Samuel T. Spear, D.D. New York: *Dodd, Mead & Co.*

Coming as it does from an eminent clergyman, it is somewhat surprising to find in this treatise the ablest exposition of and argument for the purely secular theory of government that has yet been written by an American. Dr. Spear maintains that the proper functions of civil government are the protection of the citizen against wrong at the hands of his fellow-citizens or of the citizens of other States; that it should have nothing to do with the work of administering, sustaining, or teaching religion, its only legitimate function in this respect being the affording of "impartial protection to all the people in the exercise of their religious liberty, while so limiting this exercise as to make it compatible with the peace and good order of society;" and that, as a consequence of this general doctrine, "the public school, like the State under whose authority it exists and by whose taxing power it is supported, should be simply a civil institution, absolutely secular and not at all religious in its purposes"—in other

words, that the Bible should be excluded from the public schools because for the State to prescribe a system of religion to be taught therein, or forms of worship to be there observed, is equivalent to a State religion in the public school. Even if valid exception could be made to these propositions on general grounds, he proceeds to show, by a minute and detailed examination of the national constitution and of the several State constitutions, that they have certainly been incorporated into the American theory or system of government; and that any one who maintains that the public school, or any other institution created and maintained by the State, should be made the organ of religious instruction or worship, comes into direct collision with the American doctrine as to the nature and scope of the functions of civil government. "We are quite aware that [this doctrine] excludes the Bible from the public school, just as it excludes the Westminster Catechism, the Koran, or any of the sacred books of heathenism. It pronounces no judgment against the Bible and none for it; it simply omits to use it, and declines to inculcate the religion which it teaches. This declinature, while expressing no hostility to

the Bible, is founded on the fact that an American State can not, in consistency with the principles of its own organization and impartial justice toward all the people, undertake the work of religious teaching or worship in any form of the idea. A State differently organized might do so in consistency with its principles, but an American State can not."

Dr. Spear's argument takes a far wider scope than the mere question of Bible-reading in the public schools, including, indeed, a most luminous discussion in all its bearings of the proper attitude of the State toward religion and the Church. His book will prove helpful alike to the theologian, to the student of the philosophy of government, and to the citizen who desires to make his practice conform to sound theory; and it ought to go a long way toward settling finally and forever what promises to become a leading issue in our politics.

THE CARLYLE ANTHOLOGY. Selected and Arranged, with the Author's Sanction, by Edward Barrett. New York: *Henry Holt & Co.*

Many readers, doubtless, will welcome Mr. Barrett's excellent compilation because it will enable them to become acquainted with the teachings, beliefs, opinions, and theories of one of the greatest of contemporary thinkers and one of the most influential forces in modern literature, without putting themselves to the trouble of reading his voluminous writings. Whether, as an abstract question, it is desirable to open such royal highways to knowledge is a subject on which, of course, there can be two opinions; but as this particular work has the author's sanction, he is at least a party to any wrong it may do to either him or the reader. Its first effect, however, ought to be, and probably will be, to lead many to the original works who would not otherwise have essayed them: such tempting morsels as are here served up to him will surely whet the intelligent reader's appetite for more.

Mr. Barrett classifies his selections under such heads as "Life and the Conduct of Life," "Portraits and Characters," "Literature and the Literary Life," "Religion," "Politics," and "Historical and Miscellaneous." The extracts cover the entire field of Carlyle's published writings, and are less fragmentary in character than the contents of such books usually are. Not a few of them fill several pages each, and altogether the "Anthology" gives a very fair idea not only of Carlyle's doctrines and theories, but of his intellectual method and literary style.

POEMS OF PLACES. Edited by Henry W. Longfellow. Boston: *J. R. Osgood & Co.*

The above-named compilation, of which the volumes already issued indicate the character and scope, promises to be a sort of poetical guide-book to the world; and Mr. Longfellow gives good reason for his belief that such an one will prove far more helpful than guide-books of the ordinary sort. He says in his preface: "I have always found the poets my best travelling companions. They see many things that are invisible to common eyes. Like Orlando in the forest of Arden, they 'hang odes on hawthorns and elegies on thistles.' They invest the landscape with a human feeling, and cast upon it

'The light that never was on sea or land,
The consecration and the poet's dream.'

Even scenes unlovely in themselves become clothed in beauty when illuminated by the imagination, as faces in themselves not beautiful become so by the expression of thought and feeling. This collection of 'Poems of Places' . . . is the voice of the poets expressing their delight in the scenes of nature, and, like the song of birds, surrounding the earth with music. For myself, I confess that these poems have an indescribable charm, as showing how the affections of men have gone forth to their favorite haunts and consecrated them forever."

Of the volumes already published, four are devoted to England, one to Ireland, and three to Scotland; and it is surprising to find how adequately all the favorite resorts of sight-seers in those countries are treated of. Murray is doubtless more profuse in details, but in the matter of appetizing and satisfying description the poets certainly have the best of it. These volumes will be followed by others of a like character, descriptive of other countries, till the universal poetical gazetteer is complete. In size and style the books are uniform with the "Little Classics," than which nothing could be more convenient and tasteful.

THE SKELETON IN ARMOR. By Henry Wadsworth Longfellow. With Illustrations. Boston: *J. R. Osgood & Co.*

This is a companion volume to the same publishers' "Mabel Martin" and "Hanging of the Crane," which won such wide acceptance during recent holiday seasons. It is "like with a difference," however, the style of the present volume being more elaborate and presenting a greater variety to the eye. The text of the poem is printed in very black Roman type, each stanza occupying a leaf to itself and being surrounded with a showy

emblematical border printed in bronze-colored ink and covering nearly the entire page. The title-page is illuminated, and there are a number of pretty vignettes scattered through the book; but the burden of illustration has fallen upon Miss Mary A. Hallock, who furnishes seventeen full-page designs. These are notably good, and would alone suffice to place Miss Hallock among the foremost American artists in this field. The engraving is the work of Mr. E. V. S. Anthony, under whose superintendence the book was prepared.

THE PEARL FOUNTAIN, AND OTHER FAIRY TALES. By Bridget and Julia Kavanagh. With Thirty Illustrations by J. Moyr Smith. New York: *Henry Holt & Co.*

The critic can so seldom speak in emphatic superlatives that it gives us pleasure to be able to say unqualifiedly that "The Pearl Fountain" is the handsomest holiday juvenile of the season. The printing is very tasteful, each page being enclosed in a heavy red-line border, and still having an ample breadth of margins; the binding is chaste but rich; and the illustrations, if apt to reveal faults on a close examination, are of just the character to catch and please the eye of children. As to the eleven stories which the book contains, they scarcely suffer in comparison with the old classical fairy-tales, and are all thoroughly enjoyable.

THE ADVENTURES OF CAPTAIN MAGO; OR, A PHœNICIAN EXPEDITION, B.C. 1000. By Leon Cahun. New York: *Scribner, Armstrong & Co.*

BOYS OF OTHER COUNTRIES: Stories for American Boys. By Bayard Taylor. New York: *G. P. Putnam's Sons.*

CAPTAIN SAM; OR, THE BOY SCOUT OF 1814. By George Cary Eggleston. New York: *G. P. Putnam's Sons.*

AMONGST MACHINES. By the author of "The Young Mechanic." New York: *G. P. Putnam's Sons.*

RODDY'S IDEAL. By Helen Kendrick Johnson. New York: *G. P. Putnam's Sons.*

THE BOY EMIGRANTS. By Noah Brooks. New York: *Scribner, Armstrong & Co.*

Any one of these books would make an acceptable gift to boys for the holiday season, or indeed for any season. M. Cahun is to some extent an imitator of Verne, whom he rivals in realism of narrative if he falls below him in fertility of invention and vivacity

of style. His book purports to give an authentic picture of the world as it was one thousand years before the Christian era; and does this by describing the incidents of a Phœnician expedition of that date, which penetrated to Britain in the north and sailed around the continent of Africa, visiting all the countries of the then known world. The volume is profusely and elegantly illustrated. —In his "Boys of Other Countries," Mr. Bayard Taylor narrates some of the incidents of his foreign travels in which boys took part, and manages to combine instruction and entertainment in a very ingenious manner. Few boys will be willing to lay the book aside unfinished, though the five stories it contains are entirely independent of each other. —"Captain Sam" is the second volume of the "Big Brother Series," and is a vividly interesting story of adventure, the scenes of which are laid in the war of 1814. It breathes a manly spirit, though portraying genuine boys, and is not without historical value. —"Amongst Machines" is a book which aims chiefly at being instructive, and is designed to ground boys in the elementary principles of mechanics and at the same time to familiarize them with the processes of manufacture by which various articles of daily use in wood, stone, and iron are made. The explanations and descriptions are lucid, simple, and accurate, and numerous charts and drawings make plain to the eye what might otherwise prove difficult to the understanding. —"Roddy's Ideal" is adapted for either boys or girls, and no doubt will be equally acceptable to both. The author draws apparently from the stores of her personal experience, and the little folks to whom she introduces us are wonderfully lifelike. —"The Boy Emigrants" is a story of the adventures of a party of young gold-seekers on the overland emigrant route, and in California, during the early rush to the mines, told by one who was himself an emigrant of this description. Mr. Brooks assures us that the scenes, incidents, and characters are drawn from life and largely from personal observation, and they are certainly graphic enough to lead naturally to such an inference. The pictures in the volume are exceptionally good.

FOREIGN LITERARY NOTES.

CAPTAIN NARES, we are glad to hear, is writing an account of his Arctic Expedition.

THE MS. of the work on "Babylonia," which the late Mr. George Smith was preparing for the Society for Promoting Christian Knowledge, has been left in a complete state, and is now in the printer's hands.

THE MS. remains of the late John Keble are in an advanced stage of preparation, and the publication of them will be accompanied by an essay by Dr. Pusey, together with an elaborate criticism by Dr. Newman.

FRIEDRICH BODENSTEDT, famed under his Persian disguise of Mirza-Schaffy, has just completed his first dramatic poems, entitled "Emperor Paul" and "Transformations." They are looked forward to with much interest in Germany, where his Persian imitations have met with brilliant success.

THE Sultan has given orders for the classification and formation of a catalogue of all the MSS. in the library of the Old Seraglio Palace. At the same time, his Majesty has commanded translations to be made of the most interesting writings and works in Arabic and Persian which are to be found in that rich collection.

THE *Neue Freie Presse* announces that the Crown Prince of Germany has made his *début* as an author. Under the title *Meine Reise nach dem Morgenlande im Jahre 1869*, the Prince has described the incidents of his visit to the East, when he took part in the ceremonial opening of the Suez Canal. Unfortunately for those interested in royal authorship, the world at large will have small chance of making itself acquainted with the Prince's work, as the present edition is limited to forty copies, all of which have been bestowed by the writer on the companions of his travels. The book is in quarto, and consists of about 150 pages.

MR. PARKER is proceeding vigorously with his elaborate book upon the archæology of Rome. The eighth division of his work, "The Aqueducts," is all but ready, and it is illustrated with thirty-six plates. Before long will follow "The Catacombs," illustrated with twenty-four plates; and another volume is under weigh in which three subjects will be treated, "Church and Altar Decorations in Rome," "The Tombs in and near Rome," and "Mythology in Funereal Sculpture and Early Christian Sculpture." This volume will contain sixty plates. The work will be concluded in an eleventh volume on "Early and Mediæval Sculpture."

THERE is good news for the countless admirers of the great Russian novelist, Ivan Tourguénief. He has just finished a new work, which will appear in the January number of the *Vyestnik Yevropy*, or *Messenger of Europe*. In it he will depict the Russian society of five or six years ago, and will discuss the social and political questions by which it was then agitated. Some rumors assert that he will,

to a certain extent, rehabilitate the character of the younger and more impulsive generation of Russian thinkers, whose feelings he somewhat, though unintentionally, wounded by the vigor with which he used the literary scalpel while vivisectioning the Nihilistic characters which figure in his "Fathers and Children," probably his greatest work.

SCIENCE AND ART.

THE PHYSIOLOGY OF HEARING.—The *Berlin Journal of Chemistry* is responsible for the following facts, which it gathers from a medical journal. It states that Herr Urbantschitch calls attention to the fact that if a watch be held at a little distance from the ear, the ticking is not heard uniformly, but there is a swelling and diminishing of the sound. If held at such a distance as to be scarcely audible, the ticking will come and go, being at times perceived distinctly, but at times becoming wholly inaudible, as if the watch were being moved to and from the ear. This variation in perception is not always gradual; it is sometimes sudden. The same holds good for other weak sounds, as that of a weak water-jet or a tuning-fork. Since breathing and pulsation have not the least influence on the phenomenon, the interruptions of the sensation must be attributed to the organ of hearing itself; our ear is unable to feel weak acoustic stimuli uniformly, but has varying times of fatigue. To decide finally where the peculiarity lay, M. Urbantschitch made both ear-passages air-tight and applied a tuning-fork and a watch to the head. The sounds seemed not continuous, but intermittent. The cause must therefore be in the nerves of hearing.

RELATIONS BETWEEN REPTILES AND MAMMALS.—Prof. Owen has lately described a carnivorous reptile, named by him *Cynodracon major*, which has the compressed sabre-shaped canines of the lion of the genus *Machærodus*, and resembles carnivores both in the canines and incisors. In the lower jaw the bases of eight incisors and of two canines (very inferior in size to the canines of the upper jaw) are visible, and the canines are separated by a gap from the incisors. In this character, as in the number of incisors, the fossil resembles a *Didelphys*. The left humerus is 10½ inches long, but is abraded at both extremities; it presents characters—in the ridges for muscular attachment, in the provision for the rotation of the forearm, and in the presence of a strong bony bridge for the protection of the main artery and nerve of the forearm—which resemble those occurring in carnivorous mam-

mals, and especially in the Felidæ, although these peculiarities are associated with others having no mammalian resemblances. Prof. Owen discusses these characters in detail, and indicates that there is, in the probably Triassic lacustrine deposits of South Africa, a whole group of genera, many represented by more than one species, and all carnivorous, which have more or less decided mammalian analogies; and to them he gives the general name of *Theriodonts*.

CURIOUS ANIMAL TRANSFORMATIONS.—A curious instance of animal transformation has been observed, which perhaps may prove interesting to unlearned readers as well as to naturalists. A small crustacean, one of the Entomostraca, is met with on the sea-shore in different parts of Europe. On the coast of Hampshire it is known as the brine-worm or Lymington shrimp; but its scientific name is *Artemia salina*. This creature inhabits the pools in the salt marshes near Odessa. Those pools, through the breaking of a dyke, had lost much of their original saltiness. The dyke was repaired, and the saltiness of the water went on increasing until it reached twenty-five degrees. Simultaneously with this increase a modification went on in the *Artemia*, until it was changed into a species known as *Artemia Mühlhauseni*. The transformation consisted of a diminution of number in the lobes of the tail, and a general decrease of size. It took place among animals in a state of freedom, and was corroborated by experiment on similar animals in captivity, when precisely similar changes were observed. Moreover, the inverse experiment was tried: *Artemia Mühlhauseni* placed in water rendered less and less salt, gradually retrograded towards the form of *Artemia salina*. The importance of salt as a vital stimulus is, in this case, clearly demonstrated.

SNAKES THAT EAT SNAKES.—One of these creatures, which is now at the gardens of the Zoological Society, has, during its stay in this climate, devoured an enormous number of the common English snake. We learn from an American contemporary that some years ago Professor Cope described the snake-eating habits of the *Oxyrrhopus plumbeus* (Wied), a rather large species of snake which is abundant in the intertropical parts of America. A specimen of it from Martinique was observed to have swallowed the greater part of a large *fer-de-lance*, the largest venomous snake in the West Indies. The *Oxyrrhopus* had seized the *fer-de-lance* by the snout, thus preventing it from inflicting fatal wounds, and had swallowed a greater part of its length, when caught and preserved by the collector. More

recently a specimen was brought by Mr. Gabb from Costa Rica, almost five feet in length, which had swallowed nearly three feet of a large harmless snake (*Herpetrodryas carinatus*) about six feet in length. The head was partially digested, while three feet projected from the mouth of the *Oxyrrhopus* in a sound condition. The *Oxyrrhopus* is entirely harmless, although spirited and pugnacious in its manners. Professor Cope suggests that its introduction into regions infested with venomous snakes, like the Island of Martinique, would be followed by beneficial results. The East Indian snake-eater, *Naja elaps*, is unavailable for this purpose, as it is itself one of the most dangerous of venomous snakes.—*Popular Science Review*.

SINGULAR CUSTOM ADOPTED BY A TREE-FROG.—Professor Peters has lately described the mode of deposit of its eggs employed by a species of tree-frog (*Polypedates*) from tropical Western Africa. This species deposits its eggs, as is usual among batrachians, in a mass of albuminous jelly; but instead of placing this in the water, it attaches it to the leaves of trees which border the shore and overhang a water-hole or pond. Here the albumen speedily dries, forming a horny or glazed coating of the leaf, inclosing the unimpregnated eggs in a strong envelope. Upon the advent of the rainy season, the albumen is softened, and with the eggs is washed into the pool below, now filled with water. Here the male frog finds the masses, and occupies himself with their impregnation.

THE VARIATIONS OF GRAVITY.—The pendulum observations made in India have shown that there is a deficiency of attracting matter under that great continent, and this conclusion is borne out by a comparison of the geodetic and astronomical longitudes of stations on the east and west coast, from which it appears that the ocean bed exercises a stronger attraction than the raised land. In the *Astronomische Nachrichten* Herr Hann calls attention to this, and also to the circumstance that oceanic islands show an excess of attraction which cannot be accounted for by the nature of the rock of which they are composed. The theory that there are great cavities under the large continents appears hardly tenable, and the more probable supposition would seem to be that they rise above the sea-level by virtue of their specific lightness, floating perhaps like icebergs surrounded by a floe, with the molten liquid under a thin crust. There are, however, difficulties connected with precession and nutation and tides in a fluid interior, all of which Sir W. Thomson has pointed out, and we can only wait for further data. The

balance of evidence, however, seems now to have changed, inclining to the hypothesis of a moderately thin crust with fluid or semi-fluid interior.

THE COLOR OF THE EARTH-LIGHT ON THE MOON.—Most observers have described the color of this appearance as ash-grey, though Lambert found it on one occasion to be olive-green—a circumstance which he explained as the result of reflexion from the primitive forests of South America—while Hermann Klein considers the color to be a grey-green. Herr Possner, in a letter to the *Astronomische Nachrichten*, states that on one occasion it appeared to him to be a delicate bluish-grey, more pronounced near the limb, and he claims for his eye peculiar sensitiveness to color, as shown in the case of colored stars. It does not appear, however, that he took any precautions to eliminate the effect of contrast from the sky, which would, if it were of an orange hue, give rise to the complementary blue on the earth-lighted portion of the moon, and in a more marked degree near the limb. The color of the bright moon apparently changes from greenish-yellow, or even a vivid green, to bluish or reddish white, according to the hue of the adjacent sky, which is therefore an important element in the enquiry as to the real color of any portion of the moon. And it is to be borne in mind that contrast operates most powerfully for eyes which are most sensitive to color. Herr Possner may, however, have trained his eye to allow for this effect, though this is very difficult in the case of greys, which are nearly neutral in hue.

ON THE HEIGHT OF THE AURORA BOREALIS.—In discussing the observations made by himself upon the aurora during the Swedish expedition of 1868 to the North Pole, Professor Lemstrom, of Helsingfors, states that although Loomis, and even Bravais, believed that observations which give a very low height to the aurora are erroneous, and the result of some illusion, yet he cannot agree with them; and he offers in support of his opinion, among other things, the phenomena observed on the 18th of October, 1868, at the entrance of the Norwegian Archipelago, when the whole horizon was covered with rays which were soon united around the magnetic pole, forming a regular crown. All the phenomena that he has observed and described in regard to the illuminated edges of clouds show very plainly that in these cases the polar light was produced in the region of the clouds, and even lower. We know by numerous observations that the number of thunder and lightning storms diminishes considerably as we ap-

proach the polar regions, so that they no longer occur in the latitude of 70°. Must we, then, conclude that in these regions the clouds are completely deprived of electricity? Certainly not, but only that the electrical discharges are made in some other way. In these high latitudes electricity is discharged not only by clouds, but also directly by damp air, as takes place in the winter in the temperate zones. A great many direct observations prove the existence of slow discharges of this nature; and a very remarkable confirmation is given by Augstrom, who on one occasion proved the presence in the spectrum of the yellow or auroral ray over almost the entire sky.

SCINTILLATION OF THE STARS.—M. Montigny has continued his researches on this subject with especial reference to the influence of the approach of rain on the twinkling of the stars. Eighteen hundred observations, referring to seventy stars, have been discussed, two hundred and thirty nights having been devoted to this work with the scintillometer, already described in these columns. The conclusions at which M. Montigny arrives are as follows: 1. At all times of the year the scintillation is more marked under the influence of rain. 2. Under all circumstances it is more marked in winter than in summer, and also in spring than in autumn for wet weather; in dry weather the spring and autumn are nearly equal in this respect. 3. Scintillation varies with the atmospheric refraction. 4. The approach of rain, and especially its continuance, affect the intensity of scintillation. 5. The amount of rain is always greater on the second of two days than on the first, but it is less in winter than in summer, and the more marked scintillation in winter results, therefore, from the increased density of the air due to the low temperature and high barometer. Similar conclusions are arrived at by grouping together the observations according to the intensity of scintillation, eighty-six per cent of the days with very marked scintillation being under the influence of rain. The twinkling of the stars appears also to be very marked in windy weather, and strong scintillation is a sign of an approaching storm, the colors being more decided in the case of rain, and accompanied by irregularities in the image. It is to be remarked that this is the case notwithstanding the fall in the barometer corresponding to a decrease in the density of the air, which would naturally diminish the scintillation. As might be expected, the altitude at which twinkling first becomes sensible is increased by the approach of rain.

VARIETIES.

EFFECTS OF FREEDOM IN AMERICA.—Freedom in America produces less intellectual progress than it ought to produce. It yields fair order, tolerable security, and much edible corn, but it does not yield any new growth of intellect. The philosophers who hold that progress is a result of the free conflict of minds, that if all men are allowed to think and express their thoughts, new ideas must speedily be developed, find a puzzle in the American Union. Nowhere can there be more liberty of thought or speech. There is no man of any race, or any creed, or any culture who, having in America thought out something, is not at liberty to say it as strongly as he can. The conflict of thoughts is endless. The roar of speeches is deafening. The activity of the press rises to tumult, and is by no means limited, as some Englishmen fancy, to political subjects. We have read wilder things in American religious papers than anybody ever saw in the European papers of the same kind, and every philosophy, no matter what its apparent consequences, has absolute liberty to convert all the men and women it can. Yet the total result of all this movement is very little. One new creed has attained, under exceptional circumstances, a certain development which hereafter may make it worth while to study with as little of prejudice as may be the industrial effects of Mormonism, but no new faith, or doctrine, or philosophy has risen to obtain a strong hold upon large masses. A sort of religion of good behavior, apart from all dogmas, is, we believe, professed among the German colonies of Ohio; but precisely the same religion, held in the same way, is professed in Hesse, and the masses of the American community, after a hundred years of free discussion, are in religion as like English Dissenters as ever they can be. Nowhere is piety displayed under more *borne* limitations, and nowhere is the usual more often confounded with the divine. So far from freedom proving favorable to originality of thought, there is more of it under the German military routine, or the English Philistine order, or the Russian despotic interference with utterance, than in the American republic. No individual philosopher has risen to any visible height above European rivals. No community has in thoughtfulness or originality exceeded the thoughtful circle of a European capital. No book has seriously affected the judgment of mankind. There has been no intellectual produce anywhere in the Union equal to the mass of brain set free to produce, the very best that can be said being that in the New-England States, the

average of intelligence of the people is a little higher than average intelligence has ever been elsewhere, and even that would be denied by Scotchmen; while historians, who know that the Athenian freemen were in the intellectual domain during one century at least, would smile in pitying derision of the statement. Is it not just possible that the human intellect benefits a little by compression; that compulsion to think deeply is not bad for thought; that liberty of premature egress produces on thought the result it produces on water, namely, a prerogative of waste which creates not fertility, but morass? We do not say it is so, for we recognise that the proposition pushed to its extreme becomes absurd—that, for example, no dumb Luther can create belief in the right of private judgment—but the history of America certainly suggests that thought is none the worse because oppression compels it to carry weight, that is, to go into training. The time is as yet too short, but if in another century America has not added some great kingdom to the intellectual domain, another illusion will have been dispelled as potent as that which once bound all Europe to the belief that society could only be safely organised by ascending grades, that it was happiness enough for the broad, low layers to know how high was the topmost story which they had the painful privilege of supporting.—*The Spectator*.

CLASSIC DANDYISM.—It was in the heyday of dandyism that young Decluseau first appeared above the horizon. Brummel had indeed passed the meridian of impudence, and no rival had as yet succeeded him in notoriety. But there were aspirants to the most conspicuous place in the world of foppery. Tom Duncombe starred it in the green room; Henry Mildmay on the box seat; and Lytton Bulwer in the last novel. But the hour and the man had not come, for d'Orsay had not yet begun to reign. With him the dazzling day of coxcomby reached the climax of affectation and then faded into forgetfulness. Soon after his coming into England Decluseau *père* had been of use to D'Orsay in getting him credit with a saddler and a wine merchant, and I have heard that Decluseau *fils* had shown him the way to his first hatter's. A choice among tailors was not so easily made. That required deliberation and study of character. At first, I have been told that the Count tried to import a Parisian cut and color, especially in his nether garments; but the sagacity that distinguished him from all his competitors in folly quickly led him to perceive that to be lord of the ascendant in the Park and Pall Mall he must be in all things undetectable to

the vulgar eye as a foreigner; while incontestably the most exquisitely attired among those who lounged or ambled up or down among the native-born lords of the creation, D'Orsay disdained the tricks and arts by which less refined practitioners in imposture had been wont to make men stare and women ogle. He remained, indeed, patriotically faithful to the gloves and boots of his country, but in the residue of his garments he was scrupulously English; and his adoption of the plain black frock coat was in itself a proof of his profound confidence that it was his destiny to rule the coats of men. I have myself seen Pelham not only in his early but in his later days indulge in a combination of tints and hues in the putting on of apparel that would sound fabulous were I to depict it. D'Orsay piqued himself upon being a master in the severer school of classic dandyism. He contended that true art shone in the firmness of a collar, the expansion of a lappel, the expression of a hat, not in the exaggeration of these articles, which was "*gauche* and *see-ly*." Everything about him was elaborately studied not merely for the sake of its own form and tone, but with reference to the unrivalled being who was to enjoy it. His cabriolet (what a cabriolet it was!) had nothing showy about it; and horse and tiger, harness and whip, were in equal perfection of keeping with the elastic vehicle which was his ambulatory throne. Tradesmen vied with one another for permission to have their productions advertised by his patronage, and he came at last to be regarded as the most approved method of letting the paying world know how they could be served. Little Decluseau had sufficient *nouse* to win the fancy friendship of the illustrious fop. At first he was a walking dictionary, then an active vidette; always a pleasant and presentable guest at a pinch, and always versatile and handy as a friend in a scrape; never at a loss for an answer or the show of one; up to everything that was going on, no matter how good or how bad; having the name of every jockey, duellist, actress, politician, painter, or puppy at his tongue's end; and above all with a knowledge, partly derived from experience and partly from hearsay, of where it was best worth while to dine.—"*The Duodecimo Dandy*," in *the Gentleman's Magazine*.

THEATRICAL PERFORMANCE IN SIAM.—After dinner we had a theatrical entertainment, or "*lacon*," as it is called in Siam. The scene which presented itself as we passed out of the house was novel and effective. A large court at the back was used for the display, and here at one end a small stage was erected, with some painted canvas behind, representing the front of a house, through the doors of which

the performers appeared and disappeared. On the stage, a woman, gorgeously dressed in a tight-fitting costume, glistening with gold and silver beads and scales, and a huge conical head-dress, likewise gilt, was squatting. In front of the stage were two rows of male and female performers, dressed in a similar style, squatting on the ground. Behind these again was the band, and on the left of the performers were a number of women and girls, armed with sticks, which they bring together with a clash, keeping time to the music from beginning to end of the performance. Imagine the result of this clanging, kept up for five or six hours without ceasing. On the right hand side a clear space with chairs was reserved for the governor and party, and the background was a living mass of faces; the whole lit up with a lurid red glare by torches set on stands, in rows, on each side of the stage and performers. I cannot give you a very vivid account of the performance for the simple reason that there was nothing to describe. A more dismally monotonous affair I never witnessed; all talking and going through extraordinary contortions with hands, arms, fingers, and nails, turning them up and down and round and inside out. The principal female actors have nails to the fingers of one hand three or four inches long—a disgusting sight, but, I believe, a sign of high breeding, showing that that work is beneath their dignity. The Siamese audience sat it out very stolidly, with impassive faces and open mouths, doubtless enjoying themselves immensely in a quiet way. The most amusing part of the affair (to us) was the governor's young boy, a little dot hardly three years old, who smoked the whole time, although hardly high enough to reach the cigarettes off the table. The only drawback to this amusing phase of childish precocity was the ingenious way in which he burnt holes in unsuspected parts of our wedding garments with the lighted end of his cigar. Another source of parental pride must have been the playful way in which he would plunge his fist into the pit of our stomachs, the joke of which we did not quite enter into, though of course one had to smile pleasantly. Altogether he was rather a nuisance. But the crowning piece of all was to see this youngster rushing wildly about in a state of nature the whole of the evening. One could not help envying him in a certain sense, for we found it excessively hot. After sitting patiently for three hours, we became rather anxious whether there was going to be an end, for we had heard of Siamese dramas continuing over a century—a terrible prospect. I think the governor must have noticed our flagging spirits, for many were nodding in their chairs,

and he brought the performance to a close. The prompter, contrary to our custom, sat well in the centre, and called out the parts in a loud and clear tone, heard everywhere. But then it would be rather too great an effort of memory to commit to it a play lasting a century or so.—*Leisure Hour.*

ARCTIC ANTICIPATIONS.—The botanical results from an Arctic expedition, even by the ocean ways we have suggested, might prove of great importance, although regions wrapped in perpetual ice would not naturally be looked upon as favorable to the germination of plants and trees. Spitzbergen and Greenland are rich in flora. The annalist of Captain Hall's expedition states that there were many species of flora found at Thank God Harbor, Newman Bay, some highly variegated, and of most beautiful colors, but odorless. Not only were the forms most elegant and graceful, but the colors were as brilliant as tropical flowers; and in many spots the groups or patches gave the appearance of fairy gardens, presenting a striking contrast to the rugged region in which they were found. Dr. Hooker has also pointed out that the flora of Greenland, though one of the most poverty-stricken on the globe, is possessed of unusual interest; and Von Heuglin found 290 kinds of plants in Spitzbergen, and no less than 226 in Novaya Zemlya. The study of the distribution of these would be greatly facilitated by an Arctic expedition. In the event of finding land at the North Pole, especially should Greenland be found to extend far in that direction, an interesting—perhaps the most interesting—problem to solve by the enlightened Arctic explorer will be the ethnological one. Moreover, should the "open Polar sea" prove a reality, it is not less certain that light would be shed upon this question by an expedition penetrating to the highest latitude. It might reveal an actually existing race akin to the "Arctic Highlanders," of which Sir John Ross considered there were evident traces in Greenland anterior to the Eskimo—an almost prehistoric race of men, Asiatic in origin—in which he has been sustained by the opinions of Arctic authorities no less eminent than Baron von Wrangell, Kane, Inglefield, General Sabine, and Mr. Markham; the latter, indeed, having made special investigations relative to this subject. There even now exist traditions among the Eskimo tribes of far northern lands peopled by superior beings to themselves, where herdsmen fatten their musk oxen, and where live men with long beards having churches and clocks—not so different, indeed, from the theory Grotius entertained, but which even the early Dutch expeditions very easily exploded. More perti-

nent, however, to the immediate subject, and most creditable to the perception of this great man, is the following opinion of Grotius as to the common origin of the far Northern races of the Old and New World, given a century before the discovery of Behring's Straits: "I should not dare assert whether they" (the Russians, with whom the Dutch voyagers talked at Waigatz) "had not heard something of that strait between Tartary and America of which the common origin of the two peoples, apparent from looks and manners, evidences the existence."—From "*The Dutch in the Arctic Seas*," by Samuel Richard Van Cammen.

FINE GRAVE CLOTHES.—Not satisfied with lace when alive, both men and women crave for it as a decoration for their grave-clothes. In Malta, Greece, and the Ionian Islands, the practice of burying people in lace has acquired an unsavory reputation, on account of the custom of rifling the tombs and selling the lace—often in a filthy condition—in the market. At Palermo, the mummies in the catacombs of the Capuchin Convent are adorned with lace; and in northern and middle Europe this fashion prevailed for a long period. In the church of Revel lies the Duc de Croy, a general of Charles Twelfth, in full costume, with a rich flowing tie of fine guipure. He was never buried, by-the-way, his corpse having been arrested for debt; so that he remains, Mahomet-like, suspended between earth and sky. The Duke of Alva—not the great duke, but one who died in Paris in 1739—was, by his own direction, interred in a shirt of the finest Holland, trimmed with new point-lace; a new coat, embroidered in silver; a new wig; his cane on the right, his sword on the left, of his coffin. The beautiful Aurora Königsmarck lies buried at Quedlinburg amid a mass of the richest Angelterre, Malins, and guipure; and the celebrated Mrs. Oldfield "was laid in her coffin in a very fine Brussels lace head; a Holland shift, with a tucker of double ruffles; and a pair of new kid gloves." In her lifetime she had been a great judge of lace, and treasured a statuette of the Earl of Strafford, finely carved in ivory by Grinling Gibbons, entirely for the beauty of its "Vandyke" lace collar. The lines of Pope have immortalised the story of Mrs. Oldfield's death. A ridiculous enactment had been made commanding English people to be buried in woollen:

"Odious! in woollen! 'twould a saint provoke!"

(Were the last words that poor Narcissa spoke).

"No, let a charming chintz and Brussels lace

Wrap my cold limbs, and shade my lifeless face;

One would not, sure, be frightful when one's dead—

And—Betty—give this cheek a little red."

All this seems ridiculous and melancholy enough at first sight; but yet Mrs. Oldfield had a method in her madness. Her solicitude as to her appearance is explained by the fact that, previous to her interment in Westminster Abbey, she was to lie in state in the Jerusalem Chamber. The opinion of Dr. Johnson on lace is worth quoting as an admirable specimen of the style of the learned doctor, when plunging, like a bull into a china-shop, at a subject of which he was utterly incompetent to judge. The fine meshes of point-lace were not strong enough to hold the lover of veal-pie with plums in it. "A Brussels trimming," he thundered to Mrs. Piozzi, "is like bread-sauce; it takes away the glow of color from the gown, and gives you nothing instead of it; but sauce was invented to heighten the flavor of our food, and trimming is an ornament to the manteau, or it is nothing."—*All the Year Round*.

PHYSICAL CHANGES IN ENGLAND.—It is not impossible that the climate has actually changed since England was covered with bush and swamp. It seems certain that the rainfall is less, and probable that is more evenly distributed; that there were greater floods and less fog in the twelfth and fourteenth centuries. A year in which the snow only lay for half a day during the winter months is recorded by one of our chronicles as a miracle; and a frost like that of A.D. 1281, when men skated from Lambeth to Westminster, and the great masses of ice breaking up bore down five arches of London Bridge, has no parallel later than Charles II. Earthquakes were violent and frequent. In the ten years from A.D. 1825 no fewer than five are recorded, two of which are said to have been great and horrible, while a third was so violent that it shook down several churches in Kent,

"Chambers, chimneys, all to burst,
Churches and castles foul 'gan fare,
Pinnacles and steeples to ground it cast,
And all was for warning to be ware."

Even volcanoes are recorded, though not in England itself. A great one broke out in Guernsey during the reign of Henry III., flames bursting up out of the sea, consuming large parts of the cliffs, and sending showers of ashes over the land.—*English History in the Fourteenth Century*, by Charles H. Pearson.

STORIES OF LIONS.—There was recently an old lioness at the Zoological Gardens of Dublin, who fell sick. (This institution is eminently successful in rearing cubs, which are sold to different menageries at great prices, a hundred pounds or more, and we may come

at last to owe our knowledge of the animal to such ignoble sources.) As the poor lioness became more and more infirm, the rats which were tempted into the den by the pieces of flesh lying about it, grew so bold that at last they began to nibble her majesty's poor old toes, and troubled her exceedingly. A little terrier was put into the cage to keep them in order; but the lioness resented his entrance and showed her dislike in every sort of way. At length, however, she saw the dog catch a rat, when its *raison d'être* seemed to strike her. She became exceedingly attached to her little protector, let him sleep upon her front paws, right under her nose, every night for warmth, a place of honor, no doubt, if a somewhat alarming one, and testified her tender affection for him continually until her death. The second relates to a French lion, or at least a lion in the French menagerie, whose actions, as is the fashion of his adopted country, were more sensational and dramatic than with us! Edgar Quinet in his journal tells how one day he went with the naturalist M. Geoffroi de St. Hilaire to the Jardin des Plantes. "In one of the cages were a lion and a lioness together. They were standing up, quite motionless, and seemed not even to see us. Presently the lion lifting up his great paw, placed it slowly and softly on the forehead of the lioness, and both continued in the same attitude as long as we remained before them. What was intended by the gesture? A painter who should have desired to represent calm grief and the deepest compassion could not have invented anything more striking. 'What does it mean?' said I to Geoffroi. 'Their lion whelp died this morning,' replied he. Then I understood what I saw; pity, good-will, sympathy, all these sentiments might be read in those fierce countenances.—*Good Words*.

A WATER-LILY AT EVENING.

SLEEP, lily on the lake,
Without one troubled dream
Thy hushed repose to break,
Until the morning beam
Shall open thy glad heart again,
To live its life apart from pain.

So still is thy repose,
So pure thy petals seem,
As heaven would here disclose
Its peace, and we might deem
A soul in each white lily lay,
Passionless, from the lands of day.

Yet but a flower thou art,
For angel ne'er or saint,
Though kept on earth apart
From every earthly taint,
A life so passionless could know,
Amid a world of human woe.

F. W. B.

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